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JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

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The 1992 Georgia General Assembly

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OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported. Table adapted from Facts and Comparisons 1991 and Catalano RB. The medical approach to management of pain caused by cancer. *Semin. Oncol.* 1975; 2; 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. *Ann. Intern. Med.* 1980 588-96.

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1. Data on file, Knoll Pharmaceuticals
2. Standard industry new prescription audit

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FEATURES

Push and Pull: A Look at the 1992 Georgia General Assembly
By Cynthia Haney 19

Medicare Rip-Off: DME Fraud Bleeds the System
By Martha J. Foster 23

Surgical Treatment of Spontaneous Dissection of the Internal Carotid Artery: Case Report and Review
By Mark J. Costantino, MD 27

EDITOR'S CORNER

On Being a Doctor at the Year's Beginning
By Charles R. Underwood, MD 13

EDITORIAL

Cost to Society High for Bogus DME Orders
By Donald C. Chait, MD 17

LEGAL

Rescuing Tort Reform
By James D. Comerford 31

HEART

Diagnostic and Therapeutic Considerations in the Management of Atrial Fibrillation
By Mark E. Silverman, MD 33

DEPARTMENTS

Advertising Index 42

Calendar 10

Manuscript Information 42

President's Page 8

THE COVER

Watson and the Shark; John Singleton Copley; National Gallery of Art, Washington; Ferdinand Lamont Belin Fund; dated 1778.

Medicine's gains in the area of tort reform are being threatened by proposed bills in the 1992 Georgia General Assembly. MAG is closely involved with all legislation affecting medicine. See Mr. Jim Comerford's LEGAL article (p. 31) and Ms. Cynthia Haney's lead article (p. 19).

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EDITORIALS

Introducing Cardiology 1992

By Robert C. Schlant, MD

51

Pay as Much Attention to Firing as to Hiring

By Alfred A. Messer, MD

53

FEATURES

What's New in Cardiovascular Imaging in 1992?

By Randolph E. Patterson, MD, Robert L. Eisner, PhD

61

Advances In Cardiovascular Therapy

By Jan L. Houghton, MD

69

Tropical Pyomyositis

By Jeffrey P. Steinig, MD, John W. Odom, MD, Paul F. Jurgensen, MD, James S. Williams, MD

75

Primary Fallopian Tube Carcinoma With Coexistent Tuberculosis Salpingitis: A Case Report

By Anne K. Wiskind, MD, A. Gatewood Dudley, MD, B. Majmudar, MD, Kathleen C. Masterson, MD

77

Management of the Obstructed Ureter: Another Indication for Video Laparoscopy

By Charles R. Gershon, MD, J. Stuart McDaniel, MD

83

EDITOR'S CORNER

On Retirement

By Charles R. Underwood, MD

59

CANCER

The American Cancer Society's Rehabilitation Programs: Toward A Comprehensive Cancer Cure

By Carol Hughes, RN, MSN

87

LEGAL

Strategies for Saving Money and Minimizing Risk on Your Next Office Lease

By M. Suellen Henderson

89

DEPARTMENTS

Advertising Index

93

Calendar

55

Manuscript Information

93

President's Page

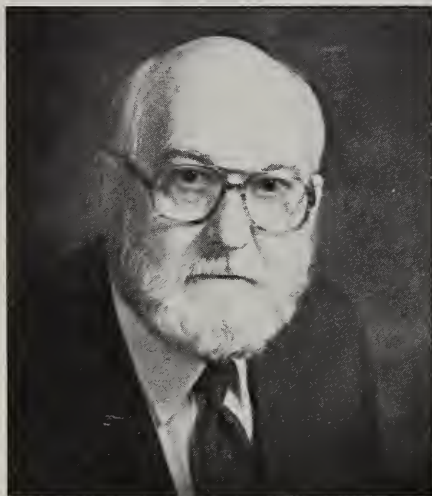
50

Quiet Thoughts

94

THE COVER

Cover photograph by Howard Sochurek, Delray Beach, Florida. Design by Hank Richardson, Atlanta.



Cyler D. Garner

SOMEONE RAN A CARTOON across my desk the other day that I thought had a wry humor. In this cartoon, a donkey, representing the Democratic Party, and a man representing the press are dragging feet first another man in a straight jacket with the words "middle-class" on his arm band. Mr. Middle Class is being dragged toward a third man who has a hypodermic needle in his hand is himself labeled More Government. The guy labeled Middle Class is yelling "I want less government! I want Congress to quit spending our children's inheritance on addictive social programs! I want a market economy! I want ...!"

The Donkey is saying to the media guy, "Obviously this guy wants a national health care program."

We've seen so many changes in the past year. Sometimes it seems that almost everywhere people are turning toward more freedoms — or at least attempting to turn to more freedoms. We've seen the dissolution of the Soviet Union into smaller governments that people obviously believe will be more responsive. Remember when Nikita Khrushchev promised that "our grandchildren will bury your grandchildren"? I never believed it was possible until the Rus-

sian or Soviet Union's peoples began to embrace the very principles that made us strong, and we began to push for the principles that made them weak. They may indeed bury us, and if we continue to lose industry and incentive in this country they will have to bring the shovels. What has that to do with medicine and you in particular?

You, I, and our patients are the fellow being dragged to more government as the Democratic party pushes us toward a socialized health care system that nobody really wants. We have examples of government-run, government-controlled health care. The veterans have it, the elderly have it, and the poor have it. Are you or your patients in these programs really happy over the way any of these programs are run? Are patients under the system really receiving the quality of care that could be provided if we had less of an administrative burden that adds to costs and provides no services to the public?

Medicine, like the world it is a part of, faces challenging times. If you are not involved in working with us to help improve medicine, can you really say that you have provided the highest health care for your patients? Before government takes over your office is the time to

get out and make a difference. One good way is by using the Physician's Involvement Program at MAG. You'll learn the ins and outs of government, and I promise you'll see government in a different light than you've seen in the media. You will begin to understand who helps and who hurts. And, you can become a part of GaMPAC and AMPAC so we can get more people elected who can hear the voice of Mr., Mrs., and Ms. Middle America.

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FEATURES

The Forging of the Renaissance Physician: A Philosophic and Historic Perspective

**Part I: The Influence of Hippocrates, Galen, and Islamic Physicians
Part II: The Philosophic Basis for Pre-Renaissance Medical Knowledge**

By Miguel A. Faria, Jr., MD

119

Crawford W. Long in His Medical Setting

By James Harvey Young, PhD

127

A Countryman's Notes: On a Horse Named Boone

Philip T. Schley, MD

137

LEGAL

Hospital/Physician Joint Ventures Take Another Direct Hit

By Robert N. Berg

139

CANCER

Computerized Cancer Information Sources

By Martha C. Watkins, MLS

143

DEPARTMENTS

Advertising Index

150

Calendar

110

Letters to the Editor

111

Manuscript Information

150

Notice of Retraction

109

President's Page

102

Program Highlights — Auxiliary Annual Meeting

115

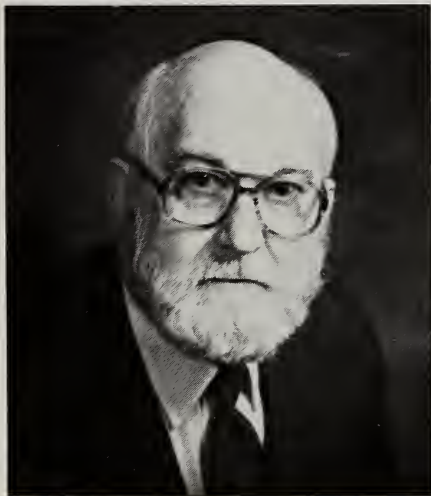
Program Highlights — MAG House of Delegates

114

COVER

Manuscript illustration showing Galen flanked by Hippocrates and Avicenna, from an edition of the works of Galen published in Lyons in 1528. As Galen looked to Hippocrates as his authority, Avicenna looked to Galen. Photo courtesy of National Library of Medicine, Bethesda, Maryland.

Cover design by Hank Richardson, Richardson Design, Atlanta.



Cyler D. Garner

Medical History

WE TURN THIS MONTH to the history of medicine, an appropriate time for the discussion, since this month marks the 150 anniversary of the first use of ether as an anesthetic. You can read about that discovery and its importance in article about Crawford W. Long in this issue of the Journal.

All Georgia physicians, in fact all American physicians, should be proud of Dr. Long, who, practicing in a small town in northeast Georgia, made what may be American's most important contribution to medicine. I don't think it is an exaggeration to say that medicine changed more since that discovery went from a small-town doctor's office to a world-wide practice. Certainly the dramatic advances we have made in surgery would have been impossible without that simple observation and subsequent use by Dr. Long. Dr. Long delayed publishing his discovery for reasons no one clearly understands except those of us who practice medicine in small towns. Then two dentists in Massachusetts tried to claim credit for this discovery. Only a Congressional investigation was able to clearly establish that Dr. Long was the first to use ether anesthesia.

As I write this, medicine faces another moment in history that deserves our attention. Despite the fact that there are no public initiatives for draconian reforms of our health care system, both political parties, spurred by a press in need of headlines, have taken health care "reform" as their issues.

To prove my point, a couple of months ago Deborah Steelman's commission, which was called the 1991 Advisory Council on Social Security, released its report. Ms. Steelman is one of President George Bush's political advisors.

MAG sent Joseph P. Bailey, Jr., MD, to testify before the commission during a hearing in Atlanta. Joe's description of his reception, coupled with the reception that others supporting nationalized health care received, left no doubt that Ms. Steelman's group had its own agenda. If a group with an overt bias toward "reform" could find no public support for comprehensive reforms, should we not conclude that the public is not ready? And how many times must it be said before those with their own private agendas agree?

Though Gordon is a small town

by American standards, we have our share of people with good common sense. We say that the agendas of the 1960s are no longer our agendas. Yet there are those in Washington that haven't got the message that we want less government and certainly fewer government programs.

We agree that changes need to be made in accessibility of health care, and cost factors must be considered. I think I can speak for all my neighbors when I say we don't want a health care system with "the efficiency of the Post Office, the compassion of the Internal Revenue Service, and the cost overruns of the Defense Department."

If you agree, you might find that this is the time to stand up and be counted. If we are too polite or too busy to protest, others will grab the spotlight and twist the message for their own ends. This is one issue on which I wouldn't expect much help from Congress.

Cyler D. Garner, M.D.

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**The Forging of the Renaissance Physician
Part III: The Physicians and the Period of Rebirth
Part IV: Physicians For All Seasons**

By Miguel A. Faria, Jr., MD 165

A National Resource — A State Treasure

By Paul E. Peach, MD 177

Experience with Cultured Skin in Georgia Regional Burn Unit

By Edward J. Law, MD, Hermann A. Orlet, MD, Joseph M. Still, Jr., MD 185

EDITOR'S CORNER

Of Our Values

By Charles R. Underwood, MD 161

LEGAL

**"And There's More . . ." — Federal Trade Commission Announces
"New Concern" With Physician Joint Ventures**

By Robert N. Berg 189

DEPARTMENTS

Advertising Index 198

Book Review 163

Calendar 164

Manuscript Information 198

President's Page 159

COVER

Paracelsus (1493-1541), painted by Jan van Scorel, was a gigantic personality who introduced metals into pharmacology and taught reliance on one's own observations, not ancient authorities. He was truly a Renaissance physician who also broke with tradition by teaching not in Latin but in the vernacular.

Photo courtesy of the Louvre, Paris, France.

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EDITORIAL

Introducing This Special Issue

By Gene G. Abel, MD

209

SCIENTIFIC ARTICLES

Male Sexual Problems and the General Physician

By Stephen B. Levine, MD

211

Medical Evaluation of Erectile Dysfunction

By J. Maxwell White, MD

217

The Sexual Difficulties of Women

By Sandra R. Leiblum, Ph.D

221

Hormones, Behavior, and Sexuality In Women

By Anthony E. Karpas, MD

227

Evaluating Couples for Sex Therapy

By William C. Talmadge, PhD, Lynda Dykes Talmadge, PhD

233

Sexual Misconduct by Physicians

By Gene G. Abel, MD, Drue H. Barrett, PhD, Peter S. Gardos, BA

237

EDITOR'S CORNER

Of Chromosomes X and Y — Of Passion

By Charles R. Underwood, MD

207

LEGAL

Sexual Harassment: It's Not Just Applicable to Judges and Law Professors

By Andrea H. Fox

247

DEPARTMENTS

Advertising Index

254

Cover Artist

205

Manuscript Information

254

President's Page

206

COVER

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Shahla Masood, M.D., Medical Director, is a University of Florida Associate Professor and is Assistant Chairman of the Department of Pathology and director of the residency program at University Medical Center.

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EDITORIAL

Introducing This Issue

By Jack C. Hughston, MD 273

SCIENTIFIC ARTICLES

The Preparticipation Screening Evaluation

By John M. Henderson, DO 277

The Ageless Athlete

By Stephen C. Hunter, MD 283

The Female as a Sports Participant

By Letha Y. Griffin, MD, PhD 285

Shoulder Function and Dysfunction in the Baseball Pitcher

By Joseph R. Chandler, MD 289

**Ligamentous Injuries to the Lateral Aspect of the Ankle:
The Ankle Sprain**

By Robert L. Brand, MD 293

Anterolateral Impingement of the Ankle

By Kurt E. Jacobson, MD, Stephen H. Liu, MD 297

Acute Hemarthrosis of the Knee

By Champ L. Baker, MD 301

The Effects of Heat on the Athlete

By Fred L. Allman, Jr., MD 307

Cardiac Arrhythmias in Presidents and Other Athletes

By John D. Cantwell, MD, Steve Lammert, MD 311

Treating Injuries in Tennis

By William B. Mulherin, MD 317

Spine Injury in Sports

By David F. Apple, MD 323

**From the Georgia Medical Care Foundation:
"Premature Discharge" As a Peer Review Concept**

By Matt Burns, MD, Dan Burge, MD 329

LEGAL

Controlling the Spread of AIDS Confidential Information

By Phillip M. Rees 333

DEPARTMENTS

About the Cover Artist 263

Advertising Index 338

Calendar 262

Editor's Corner 271

Insurance/Financial Corner 265

Letters to the Editor 266

Manuscript Information 338

News Capsules 264

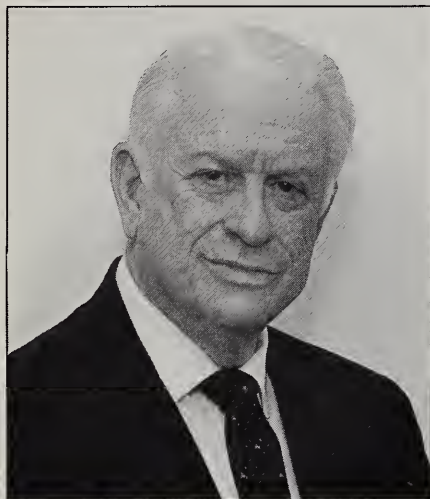
Poetry Corner 270

President's Page 262

COVER

Art by Dr. Joe Wilder, of New York City. Read more about this talented artist/physician on p. 263.

Cover design by Hank Richardson, of Atlanta.



Thomas J. Anderson, Jr., MD

THE MEDICAL ASSOCIATION had a great year under Cyler Garner. I would like to recognize and express the appreciation of all our members for your achievements and for the time that was spent during his year in office. There are several opportunities and problems that will dominate the next 12 months.

First, the election of many new local, state, and federal officials to give us the opportunity elect our friend in all these levels. Tip O'Neil said, "All politics is local," and it is here that we must give great effort. We will depend on our legislative team, which is probably the best in the nation, Jim Kaufmann, Richard Greene, and Paul Shanor to give us direction. The last 2 years have been particularly good in the State House, and I hope we will be able to repeat our past performances.

Congress and the Senate will be concerned with activity that will attempt to change the entire medical system of the United States and many well be as Tennyson said.

*"But such a tide as moving seems
asleep
Too full for sound and foam
When that which drew from out
the boundless deep
Turns again home."*

However, there is no consensus about what to do nor what model to follow. The principal problem is one that is seldom mentioned in dialogue nor polls, i.e. that is, who is going to pay the enormous cost of a national health insurance that covers everyone?

I have talked with Roy Rowland, Newt Gingrich, and Wyche Fowler who have told me of the extreme pressures in Congress but no one is willing to talk of raising taxes in an election year. As a consequence, probably nothing will be passed until next year or even later.

The driving force behind this is the marked rising cost of health insurance, medicines, machines, and equipment necessary to perform new complicated procedures, and malpractice insurance. However, in 1990 only 19.9 percent of the health care dollar was spent on physician's services.

We must remember that change without progress is fatuous and make every effort to preserve the doctor-patient relationship and keep all the other aspects of what is the best system of medical care in the world today. We must also be concerned about the continuing drop in general internists in Georgia, which fell from 1500 to 1986 to 1209 in 1990, and in family practitioners, which fell from 1344 to 1104 in 1990. Medical school officials have recently passed resolutions to attempt to increase general internists to 50 percent of total internists trained and also urge all medical schools to establish Department of Family Practice. It will take at least 5 years to see any result from these efforts and health care may be in chaos by then.

Access to all medical care will be increasingly more difficult

and expensive if patients have to decide which specialist to see or actually try to make their own appointments. Internists have traditionally made their principal income from performing physical examinations and caring for hospital patients, but Medicare has reduced or downcoded physical examinations to the point that it is not longer financially feasible to perform comprehensive exams on Medicare patients. Consultations on hospital patients frequently result in total denial of payment to the primary physicians' services by calling it concurrent care.

We will also very likely face issues of self referral both on a national and state level. These will be highly emotional and divisive. My good friend, Dr. Hank Scheffner, President of the Florida Medical Society, spoke to Reference Committee C of difficulties in this field. He said us that an adverse bill was recently passed in Florida in an impetuous and hectic session during which the physicians became divided. Medical specialists were pitted against each other. He said that our only hope is to hold together in the Medical Association of Georgia. He stressed that specialty societies should not have their own lobbyists but to let MAG coordinate all activities concerning this bill.

I quote from Thomas Wolfe: *"If a man has a talent and cannot use it, he has failed. If he has a talent and uses only half of it, he has partially failed. If he has a talent and learns somehow to use the whole of it, he has gloriously succeeded, and wins satisfaction and triumph few men ever know."*

Thomas J. Anderson Jr.

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ARTICLES

The Challenge: A Generation of "Growing Healthy" Children By Julia von Haam	369
---	-----

Family Violence: A National Epidemic By Barbara S. Tippins	372
--	-----

A-MAG Presents New Cookbook: <i>Georgia Land — A Collection of Georgia Recipes, Historic Landmarks & Scenic Attractions</i> By Mary Ann Marks	375
---	-----

Teenage Pregnancy: Everyone's Responsibility By Phyllis R. Schwartz, MN, MA	377
---	-----

Meaning and Metaphor: Highlights of MAG's 1992 Annual Meeting	381
--	-----

FINANCIAL

Having Your Cake and Eating It, Too: Common Sense in Charitable Trust Planning By Stephen C. Barton	361
---	-----

GMCF NEWS

Medicaid Precertification Department	355
---	-----

PRACTICE MANAGEMENT

Maximizing Productivity of New Associate Physicians: Proven Strategies By Gary Matthews	363
---	-----

Medical Record Documentation and the New Visit Codes By Charles H. Whigham, MD	366
--	-----

DEPARTMENTS

About the Cover Artist	349
Advertising Index	402
Auxiliary Community Health Projects Span Generations	350
Auxiliary President's Page	347
Calendar	352
Editor's Corner	353
Manuscript Information	402
News Capsules	357
Poetry Corner	348
President's Page	346

COVER

Art by Lisa Pumphrey, of Washington, DC. Design by Hank Richardson, of Atlanta.



Thomas J. Anderson, Jr., MD

Proposed Changes of the Health Care System

THE PRESENT FOMENT for changing the health care system continues unabated in Washington except for the distractions of the Rodney King trial verdict and the lootings and burnings that followed.

I fear that the near hysteria to change the United States' health care system is of such magnitude that the attitude of Congress is that they may do anything in the prevailing chaos. We must have our own plan to put into effect if this seems to be developing. We must also remain united in our own cause to continue to provide the best health care in the world for our patients but be flexible enough to recognize the value of any program or change that would truly be beneficial to our patients.

We faced a similar situation in 1964 when Medicare was put forward largely as Part A as we now know it. A group of physicians brought out Eldercare, which has many of the aspects of Part B Medicare as we know

it now. Lyndon Johnson and the Congress decided that we should have both and both went through very quickly as Senate Bill 1 and House Bill 1. The President signed this into law immediately.

There are various other plans proposed by various medical, hospital, and politicians, including President Bush himself. Almost all of these are described in detail in the *Journal of the American Medical Association* May 13, 1992, Volume 267, Number 18, page 2509. There is an editorial by George B. Lundberg, M.D., in the same issue on page 2521 which is the best article by far that I have read on the subject. It is so sweeping in its recommendations that I am a little numb and ambivalent about all of its suggestions; however, as I read and ruminate, I concur that the majority of Dr. Lundberg's suggestions are worthy. He lists these under a table entitled "The Grid Upon Which to Test Health Care Reform Pro-

posals." Does the proposal achieve the following:

1. Provide access to basic medical care for all our people?
2. Produce real cost control?
3. Promote continuing quality?
4. Limit professional liability?
5. Reduce administrative hassle?
6. Retain necessary patient and physician autonomy?
7. Consider long-term care?
8. Encourage primary care?
9. Enhance disease prevention?
10. Possess staying power of 5, 10, 20 years?

He lists the benefits for physicians in this plan. Please read these articles and let me know your opinion. This may well be the way that medicine is practiced in the next few years.

Thomas J. Anderson Jr.

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SCIENTIFIC ARTICLES

Investigating SIDS and Other Infant Deaths

By Joseph L. Burton, MD

433

Granulocyte Colony-Stimulating Factor:

A New Approach in the Treatment of Childhood Neutropenia

By Felicia M. Little, MD, Ray C. Pais, MD, Elliot Winton, MD,

Abdelsalam H. Ragab, MD

437

FINANCIAL

Juggling Fiduciary Responsibility — How to Avoid Dropping the Ball

By Stephan C. Barton

421

PRACTICE MANAGEMENT

Managing Your Office Manager

By Gary Matthews

423

HOSPITAL MEDICAL STAFF

Needed: Equal Partnerships Between Medical Staffs and Hospitals

By Gwynne T. Brunt, Jr., MD

425

LEGAL

Helpful Hints In Structuring Physician Employment Agreements

By Robert N. Berg

429

CANCER

Current Perspectives on Papillary Carcinoma of the Thyroid Gland

By Michelle K. Chiu, BS, Richard M. Sherry, MD, John P. Wei, MD

442

DEPARTMENTS

Advertising Index

446

Calendar

419

Editor's Corner

411

MAG Membership Application

409

Manuscript Information

446

News Capsules

414

Poetry Corner

448

President's Page

408

COVER

Design by Pamela Joy Trow, Atlanta.



Thomas J. Anderson, Jr., MD

Highlights of the Chicago Meeting

RESPONDING TO the steep payment reductions by RBRVS, the AMA House at its June, 1992, meeting in Chicago resolved that all necessary legal, legislative, and other means be undertaken to address the following (but not limited to) inequities:

1. Reduction of allowance of new physicians
2. The payment of EKG centers
3. Deficits in cost indices
4. Inappropriate resources and Relative Value limits
5. The deteriorating economic conditions of physician practices caused by the Medicare payment system
6. Restoration of RBRVS conversions factors consistent with a balanced budget.

A resolution regarding self referral was adopted by the AMA House that softened the AMA's previous stand that referrals by a physician to an off site facility in which the physician has a financial interest are ethical if the patient is fully informed of the physi-

cian's financial involvement with the facility.

The Board of Trustees recommended that the AMA meet with the American Hospital Association, the Pharmaceutical Manufacturing Association, and related organizations to develop guidelines for the release of pricing information in hospital charges, drugs, and medical devices to physicians and patients.

Policy modifications in Health Care America included:

1. Employers who fail to provide coverage shall be subject to penalty
2. Health IRA Tax Preferred Plans should be encouraged by employers.
3. Small employers shall receive a refundable health tax credit.
4. Health insurers and physicians shall receive a refundable tax credit for premium amounts required by benefits policy.

Physician-based managed health care is an option that purchasers may choose. It should be one choice

in a pluralistic system and follow these key proposals:

1. Managed care should compete openly and equally in the market with other delivery systems.

2. Reimbursement under managed health care plans should be easy to administer and promptly paid. Quality health care should be viewed as fair by all parties.

3. Managed health care programs should disclose the nature of any cost controls

mechanisms in reviewing.

4. Medical care should not be limited by financial incentives to physicians and others.

5. Utilization review managed care programs should be based on open and consistent review criteria that are acceptable and have been developed in concert with the medical profession.

This is the tip of the iceberg with regard to the many issues discussed and acted upon at the AMA House.

Thomas J. Anderson Jr.

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HOSPITAL MEDICAL STAFF

Empowering the Medical Staff Through Their Bylaws

By Howard L. Lang, MD

473

FEATURE ARTICLES

**Physician Contracts: HMOs, PPOs, and Hospital-based Physicians,
Exclusive Contracts, and Employment**

By Edward B. Hirshfeld

489

**Peer Review, Hearing Requirements, and Antitrust:
Maximizing Federal Health Care Quality Improvement Act
Compliance and Immunity**

By Elizabeth A. Snelson, JD

495

**Market Power, Collusion, and Exclusion in Health Care
Antitrust Enforcement**

By James M. Spears

499

Questions and Answers: How Will CLIA-88 Affect Your Practice?

509

FINANCIAL

**Juggling Fiduciary Responsibility (Part 2):
Are You Saving Too Much for Retirement?**

By Stephan C. Barton

479

LEGAL

**Medical Staff Bylaws: A Contract or a Meaningless
Mouthing of Words?**

By Richard H. Vincent, Philip M. Rees

483

PRACTICE MANAGEMENT

Getting Paid for Your Hospital Work

By Gary Matthews

486

**MAG SCIENTIFIC ASSEMBLY
PRELIMINARY PROGRAM**

516

GMCF NEWS

**Georgia Medical Care Foundation:
Medicaid Precertification Announcement**

457

HOSPITAL NEWS

Hospital-Physician Relationships

By John A. Ferguson, Jr.

458

MEDICARE NEWS

**Improved Communication with Aetna Reaps
Benefits for Georgia Physicians**

459

DEPARTMENTS

Advertising Index

528

Calendar

515

Editor's Corner

469

MAG Membership Application

529

Manuscript Information

528

News Capsules

462

Poetry Corner

526

President's Page

456

COVER

The art of Georgia's own folk artist, Mattie Lou O'Kelley, of Decatur, highlights the cover this month. Though the medical-legal issues regarding health care delivery have changed substantially since this picture memory from Ms. O'Kelley's childhood, the goals of hospitals and doctors to deliver affordable quality medical care remain the same.

We are indebted to T. Marshall Hahn, of Atlanta, for the use of this art. Hank Richardson, of Atlanta, created the cover design.



Thomas J. Anderson, Jr., MD

The Coming Conflict of Ownership/Referral

THERE IS LITTLE DOUBT that the issue of ownership/referral will be one of the leading controversies debated in upcoming meetings of the Medical Association of Georgia, the Georgia Legislature, and the U.S. Congress. New Jersey and Florida have already passed strict law that work against physician ownership and referral to clinical laboratories, physical and occupational therapy facilities, durable medical equipment supplies, parenteral and enteral nutrition supplies, home infusion therapy services, radiology and diagnostic services, radiation therapy, ambulance services, and hospital inpatient and outpatient services.

As I think about the various different arguments, both pro and con, regarding self referral, many quotations come to mind:

Perception is reality.

To be or not to be. (Shakespeare)

It is the customary fate of new

truths to begin as heresies and end up as superstitions.

(Thomas Huxley)

Genius, in truth, means little more than the faculty of perceiving in an unhabitual way. (William James)

"I wished my wife to be not so much as suspected." Caesar's remark, according to Plutarch)

Self referral, as a concept and practice, is not new. Many hospitals throughout the country were originally started and owned by physicians, including Piedmont and Crawford Long Hospitals in Atlanta. Another example of changing attitudes with the passage of time is the fact that it was once considered unethical for physicians to dispense medicines except in a rural setting where there was no drug store.

The principal claim of those who object to self referral is that it leads

to increased, unnecessary, and higher priced utilization of health care services and equipment. The proponents of self referral disagree (predictably) with this claim and state that, on the contrary, self referral leads to better control of care, more convenience, and lower prices. (Both sides of the controversy in Florida cite studies that support their opposing beliefs.)

I have never owned anything related to medical equipment or services outside my office. I feel strongly, however, that providing physician-owned services and equipment, such as radiation and infusion therapy, or other ownership in isolated areas that would otherwise be deprived of such services is not only ethical but desirable for better patient care.

Thomas J. Anderson Jr.

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The *Journal of the Medical Association of Georgia* ISSN • 0025 • 7028 is published monthly at 938 Peachtree Street, N. E., Atlanta, GA 30309-3990. Second-class postage paid at Atlanta, Georgia, and at additional mailing offices. POSTMASTER: Send address changes to *Journal of the Medical Association of Georgia*, 938 Peachtree Street, N. E., Atlanta, GA 30309-3990.

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PRACTICE MANAGEMENT

Digesting Government's Regulatory Alphabet Soup

By Gary Matthews

549

HOSPITAL MEDICAL STAFF

Hospital Medical Staff Section — Your Access to Action

By Thomas E. Price, M.D.

561

LEGAL

U.S. Supreme Court Reaffirms Right to Abortion While Permitting Some State Regulation

By Andrea H. Fox

555

INSURANCE

Are Patients Predisposed to Sue Their Physicians?

By Robert Bean

553

FEATURED ARTICLES

Alcoholics Anonymous and Addicted Health Professionals: The Georgia Experience

By G. Douglas Talbott, M.D.

565

The Changing Face of Primary Hyperparathyroidism

By Nancy W. Stead, M.D.

569

Child Abuse by Scalding

By Barry M. Renz, M.D., Roger Sherman, M.D.

574

GMCF NEWS

Are We Too Busy?

542

MEDICARE NEWS

Highlights of the Medicare Advisory Committee Meeting Between MAG and Aetna

543

DEPARTMENTS

Advertising Index

579

Calendar

544

Letters to the Editor

541

MAG Membership Application

529

Manuscript Information

579

Physician Recognition Award Recipients, January-July, 1992

547

Poetry Corner

584

President's Page

540

COVER

Design by Pamela Joy Trow, of Atlanta.



Thomas J. Anderson, Jr., MD

One More Time

MAG'S CONFERENCE on "The Law and the Physician" held last July at Amelia Island, Florida, was one of the most successful meetings that I can remember. Many of the topics covered were published in the September issues of the MAG Journal. Since I have received more comments about both the conference and that issue of the Journal, I wanted to give both an extra plug, one more time.

The entire staff is due commendation but especially Cam Taylor, Paul Shanor, Richard Greene, Cynthia Haney, and Jim Comerford. They obtained outstanding speakers which captivated the interest and attention of a large audience.

Robert Novak, an extremely conservative commentator on CNN and who also writes a twice weekly column with his partner, Rowland Evans, made the keynote speech which dealt

largely with the Presidential Campaign. Howard Lang, M.D., past President of the California Medical Association and Chairman of the AMA Hospital Staff Section, spoke on the success of a bill giving physicians the right to have an attorney present at the Judicial Review Committee level and the need to have bylaws that protect the physicians. He also feels that economic credentialing should be prevented.

Physician-patient relationship, consent to treatment, medical records, AIDS, confidential information, and allied health professionals — all in relation to Georgia Law — were discussed by Richard Greene, J.D. Sample letters of withdrawal by a physician were presented.

James M. Spears, J.D., General Counsel for the Federal Trade Commission, discussed situations that con-

stitute violations of the law that restrict competition by collusion and conspiracy.

Cynthia Haney, J.D., discussed Living Wills and Durable Power of Attorney for Health Care.

Richard Vincent, J.D., Howard Lang, M.D., and Gwynne Brunt, M.D., discussed updating Medical Staff Bylaws.

I believe that all attending the meeting benefitted from the Conference. And for those of you who didn't, be sure to read your September Journal. We are planning to conduct this Conference next year. Attending it is imperative for anyone involved in the private practice of medicine with hospital privileges.

Thomas J. Anderson Jr.

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ISSN • 0025 • 7028 is published monthly at 938
Peachtree Street, N. E., Atlanta, GA 30309-3990.
Second-class postage paid at Atlanta, Georgia, and
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souri 65251.

FEATURE ARTICLES

**Crisis in Health Care Delivery — Rescuing Medicine From the
Clutches of Government**

By Miguel A. Faria, Jr., MD

615

**Grady Memorial Hospital Centennial: History and Development,
1892-1992**

By Asa G. Yancey, Sr., MD

621

The Real Revolution in Medicine

By Waddell Barnes, MD

633

Bruxism, Neck Pain, and A History of Child Sexual Abuse

By Alfred A. Messer, MD

637

EDITOR'S CORNER

Of Thankfulness

By Charles R. Underwood, MD

597

GMCF NEWS

Favoritism, the "Atlanta Bias," and Why Pick on Me?

By Dan Burge, MD

600

INSURANCE

**Long Term Care Insurance: A Vital Component to Estate
Preservation**

By Clifford K. Klingbell, Stephan C. Barton

601

HOSPITAL MEDICAL STAFF

**Rethinking Credentialing: Preventing Economic Credentialing, Data
Bank Problems, and Other Troubles**

By Elizabeth A. Snelson, JD

603

LEGAL

Reporting Confirmed Positive HIV Tests: An Update

By Philip M. Rees

606

Guidelines for the Physician-Patient Relationship

By Cynthia Haney

607

PRACTICE MANAGEMENT

Time Management: What It Is, How It's Done

By Richard C. Haines, Jr.

611

DEPARTMENTS

Advertising Index

642

The Auxiliary

595

Calendar

599

MAG Membership Benefit

641

Manuscript Information

642

Poetry Corner

644

President's Page

593

COVER

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EDITOR'S CORNER

Of Who We Are

By Charles R. Underwood, MD

657

LEGAL

Are You Liable for the Medical Malpractice of Your Co-Owners?

By Robert N. Berg

661

HOSPITAL MEDICAL STAFF

Medical Staff Bylaws: A Double Edged Sword

By William B. Jones, MD

665

PRACTICE MANAGEMENT

Practice Automation: An Essential, Not Luxury, Tool

By Karen M. Wood

669

FEATURE ARTICLES

Factors Affecting Return to Work After Job-related Injuries

By Donald S. Bickers, MD, FACS

673

Coronary Heart Disease in Women: Status 1992

By Nanette K. Wenger, MD

679

1992 Cumulative Index of Journal of Medical Association of Georgia

682

DEPARTMENTS

Advertising Index

686

The Auxiliary

654

Calendar

656

Manuscript Information

686

Poetry Corner

692

President's Page

652

COVER

The art of Georgia's own folk artist, Mattie Lou O'Kelley, of Decatur, highlights the cover this month. We are indebted to T. Marshall Hahn, of Atlanta, for the use of this art. Hank Richardson, of Atlanta, created the cover design.



Thomas J. Anderson, Jr., MD

The New Order

IT IS QUITE DIFFICULT to comprehend what will happen to the United States health system with the election of Clinton and Gore and with the election of a democratic Congress. A lot has been promised to the American people without much thought given to how it will be financed. It is inconceivable to me that an employee will pay fifty percent of his premium and the American people will pay much higher income tax, higher gasoline tax, tobacco tax, and alcohol tax in the amount to support what will be a tremendous bill.

The number of internists and family practice physicians is steadily declining, and only half the residencies in those specialties are now filled. This is a result of these groups of physicians being grossly underpaid as compared to the surgical specialties, anesthesiology, radiology, and pathology. Nurses and physician assistants can help extend primary care, but there are too few of them to really be of any major help. It takes years to train primary physicians and ancillary help.

The cost of special procedures and

new medicines have risen beyond the ability of many patients to pay for them and some rationing of these is inevitable.

I believe that the physicians of Georgia will try to help the program succeed but it will require tremendous effort and sacrifice.

Thomas J. Anderson Jr

STATE OF THE ART



DIAGNOSTIC TECHNOLOGY

Magnetic resonance imaging (MRI) is an important tool for today's physician. MRI produces VIVID images of the body in multiple planes. It is a painless procedure that does not involve surgery or potentially harmful radiation. MRI is frequently recommended for evaluation of neural, spinal, articular and pelvic disorders. It is safe and cost effective, and its various applications are being expanded at an impressive rate.

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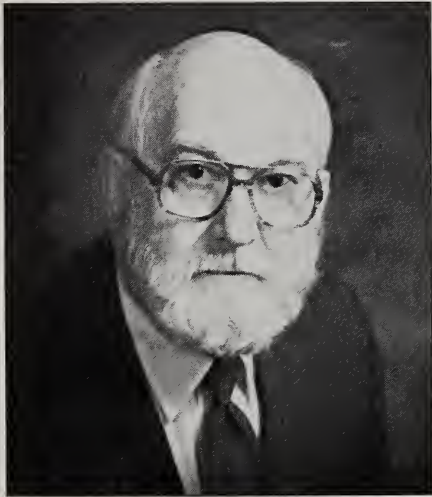
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Cyler D. Garner

AIDS and HIV Testing

HAVE YOU EVER pondered the similarity between *terrible* and *terrific*? There is only a three-letter difference, but a little difference changes the meaning completely. Someone pointed that out to me the other day, and it struck me that it applies to the HIV testing situation in Georgia.

The Medical Association of Georgia can take some pride in being able to say that we told them that AIDS should be treated as a disease rather than a civil rights issue. That we should think in terms of treatment rather than social engineering. There's no telling how many lives would have been saved by this seemingly simple change in root philosophy.

In June, 1991, the AMA agreed with this long-held MAG position, and it is of interest to me to see that the Centers for Disease Control and other scientific groups are now coming around to this same stand. Last August, Georgia's Composite State Board of Medical Examiners went a step further and said physicians should be able to perform HIV testing on high-risk patients "... when deemed medically indicated."

Civil rights issues are always important. As physicians, we are concerned that all patients get the best possible care regardless of race, religion, political affiliation, or any

other extraneous characteristic. However, this philosophy is not in opposition to testing for AIDS. MAG's philosophy demands that every patient be treated equally and viewed as every other patient and tested for whatever the physician deems medically indicated.

I have no concern about letting my patients know my HIV status, and I believe my colleagues should share the same information. We have long known that we are at risk for becoming HIV infected because we do exposure-prone invasive procedures on HIV-infected patients. While there remains a possibility that I could exchange my blood into a patient and infect him or her, I have a responsibility to tell my patient about the risk faced.

We believe that the responsibility goes the other way too: patients have a responsibility to enable physicians and other health care workers to understand the risks, and we further have medically sound reasons for knowing. For instance, you and I know that performing invasive procedures on a patient whose immune system is compromised has potential for harming the patient.

The Medical Association of Georgia and the Department of Human Resources has compiled and recently issued the *Clinicians*

Guide to AIDS. Copies were included with the December issue of the Journal sent to MAG members. Nonmembers throughout the state also received copies. Ms. Cam Taylor of the MAG staff and Dr. Joseph Wilber and Ms. Diana Kirkpatrick of the Department of Human Resources deserve special recognition for their efforts in writing this excellent *Guide*.

Contact tracing must be encouraged as well as testing, and that is controversial. At present, the limited contact tracing that is being done in Georgia is only setting back efforts to control other sexually transmitted diseases. That's worse than shutting the barn door after the horse has left because we know that sexually transmitted diseases are some predictors of future AIDS cases.

We must take the lead in educating our patients about the ways AIDS is transmitted and how to protect themselves from the disease. I'm not entirely comfortable with that. I know many of you aren't either, but we have to begin. What we now have is a serious situation, you could even say terrible. We've been in the forefront so far, and we can stay there if we are willing to turn the *terrible* into the *terrific*.

Cyler D. Garner, M.D.

The great thing in this world is not so much where we stand, as it is in what direction we are moving. To reach the port of heaven, we must sail, sometimes with the wind, sometimes against it — but we must sail, not drift, nor lie at anchor.”

—Oliver Wendell Holmes



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10-14 — *Atlanta: Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.* Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404/727-5695.

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21 — *Macon: Update on Infectious Diseases.* Category 1 credit and AAFP Prescribed credit. Contact Robert C. Fore, Ed.D., Mercer Univ. Sch. of Med., Office of CME, 777 Hemlock St., Macon 31201. PH: 912/744-1634.

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28-29 — *Augusta: Flexible Fiberoptic Sigmoidoscopy.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404/721-3967.

28-29 — *Augusta: Symposium on Pre-menstrual Syndrome.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404/721-3967.

MARCH 1992

2-7 — *Augusta: 27th Annual Primary Care and Family Practice Symposium.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404/721-3967.

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MAY 1992

4-8 — *Atlanta: MR-92-02.* Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404/727-5695.

8-9 — *Hilton Head, SC: Pain Management in the Primary Care Setting.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404/721-3967.

18-22 — *Atlanta: Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.* Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404/727-5695.

THE UNITED STATES ARMY RESERVE HEALTH CARE PROFESSIONALS BONUS TEST PROGRAM

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The **1989 National Defense Authorization Act** required that the Department of Defense conduct a test to determine the effectiveness of a recruitment bonus to attract health care professionals to the Selective Reserve of the Army. The 1991 National Defense Authorization Act directed that the test continue.

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On Being a Doctor at the Year's Beginning

Charles R. Underwood, M.D.

Ol' Man River, dat Ol' Man River,
He must know somethin', but
don't say nothing,
He just keeps rollin', he keeps on
rollin' along.

He don't plant taters, he don't
plant cotton,
An them that plants 'em is soon
forgotten,
But Ol' Man River, he jus' keeps
rollin' along.

You and me we sweat and strain
Body all aching and racked wid
pain,
"Tote dat barge, lift dat bale,
Get a little drunk and you land in
jail."

Ah gits weary and sick of trying
Ah'm tired of livin' and skeered of
dying,
But Ol' Man River, he just keeps
rollin' along.

"Showboat"

OSCAR HAMMERSTEIN, JEROME KERNS

What ever end man aims for, is
not the final end. For that gives
not man true happiness. What was
an end becomes a new beginning,
according to the course that man
can understand.

ANONYMOUS CATALAN POET

HERE WE STAND, we bold partici-
pants of the health care sys-
tem, at the gateway of yet another
year peering with blurred vision
into the misting fog of the future.

Stand and look, blink and gaze,
wondering, pondering, speculat-
ing, calculating as to what lies
ahead. We have seen uncertain
times before, some of us have, but
not within the memory of the life-
time of any of us has the year ahead
possessed such an aura, such a
threat as does this just ahead, 1992.

Why, one might ask, should
change, uncertainty and unpredict-
ability cause concern to a group of
people, a profession, characterized
by attracting to its ranks those indi-
viduals whose everyday brings
forth a never-ending array of prob-
lems to be solved, the answers to
which lie hidden in uncertainty.
We of all people, or so it might
seem, would possess the character-
istic of arising each morning,
stretching our limbs and our minds,
and saying to our inner self, "Thank
God, here comes another day, an-
other challenge, another 24 hours
of uncertainty." Surely by now we
must have learned to relax in, if not
relish, a life of unpredictability.

But have we? I have an uncom-
fortable feeling, an uneasiness, and
it comes not only from within but
also from my hallway conversa-
tions with my peers that all is not
well with us physicians. With our
profession. Listen to us talk. "I cer-
tainly wouldn't let a child of mine
go into medicine today." "I'm not
taking any more Medicare patients,
I just can't afford to." "Practicing
medicine just isn't what it used to
be." "I am going to retire early be-

cause it just isn't fun anymore." Lis-
ten closely. These are the remarks,
the feelings and opinions, of our
peers. That's "us" talking. Listen
and then ask yourself again if all is
well with us.

Surely we have our problems,
but so do the homeless, the un-
insured, the chronically ill, and the
unemployed. We stand this month
on the threshold of yet another
year. Twelve complete months lie
ahead inviting, challenging us to
produce our best efforts. And what
you might ask is that "best effort"?
To which I might respond: tell our
children that here in the world of
the "physician and surgeon," in the
world of the "healer of mind and
body," lies an opportunity for self
realization unequalled by any field
of endeavor and then turn them
loose to make up their own minds
as to the rightness or the wrongness
of that advice. We can sponsor and
support alterations in the laws of
our land aimed purely at improving
our health care system with full
confidence that from such will flow
unimagined benefits to our per-
sonal lives and yet with this latter
gain coming on its own and not
serving as a primary motivating fac-
tor. We can make RBRVS work,
help reform it so that it does work,
with sincere admission that there is
such a thing as "relative value" to
our services. We can become an
integral part of the social and politi-

cal fabric of our communities in such a meaningful manner that we dispel the image and the public notion that we are but a group of self-centered, affluent, and arrogant entrepreneurs. We can do this and more in this year ahead, and when it is behind us look in the mirrors at ourselves with deserved pride and respect.

And then finally, as to that question that seems to haunt so many of us — “Would I do it again?” — let those applicants to the class of 1992 provide an answer and some encouragement. There are more applicants to medical schools in the United States this year than in any of the previous 6 years. And 40% of them are women. Perhaps those bright young men and women provide an answer to what we can expect the future of medicine to become.

But let Ferrol Sams provide a part of the answer as he responded to a question put to him following an address some short time ago. The dialogue went like this: QUESTION: “You and Helen have a couple of boys who are doctors. Now, most of the doctors I know tell their children not to become doctors, and most of the hospital administrators I know tell their children not to go into hospital administration, that this is a bad day for medicine. But if you had young children today, you and Helen, would you advise them to become doctors or advise them to become hospital administrators? What is going to happen to medicine in the next 20 years?”

DR. SAMs: “The next 20 years? I am going to keep practicing. I think there is a given there that is presumptuous. My advice to anybody who said they *thought* they wanted to study medicine would be not to do it. My advice to anybody who said ‘I *know* I want to study medi-

cine’ would be ‘Go for it!’

“Helen and I, and I think she will back me up on this, always leaned over backwards not to try to influence our children. I am pretty snobbish about college. It was always assumed, the unspoken pressure, that you would go to college. But insofar as choosing a profession, we never put any pressure on them. But I think the only thing I told them was, ‘You know, if you want to be a truck driver be the best truck driver that you possibly can. And we want you to be an honest and an honorable one.’

“My youngest son floundered through the first 3 years of college without any true sense of direction and had taken all the prescribed courses and was in a pre-med program. His major was in biology, but he was in an agony of indecision. He didn’t *know* what he wanted to do. And I was totally frustrated because I wasn’t going to tell him what to do. You know, I couldn’t tell him to go somewhere and take an aptitude test and that sort of thing. About that time he made a D in organic chemistry, and I said you can forget medicine. And he wound up going into law and is very happy in this profession and is a very good lawyer.

“I am a very rich man because I can truthfully say that there is no person in the world for whom I have greater respect than I do my youngest child. And that is not a crown very many old men are planning to wear. To have been a baby in that family of siblings he has really shown forth. I will never forget him telling me when he was in law school that he was running into some medical students who were being contemptuous of law. He said, ‘Doctors tend to look down on lawyers, doctors tend to regard lawyers as natural adversaries and as enemies, and they make fun of law.’ And he said, ‘I feel toward law just like you do toward medicine. I

am going to be in a position to help people when they don’t have anybody else to help them and they don’t know where to turn. This to me is a sacred trust.’ And I said, ‘I never heard a lawyer say that before but I sure like to hear it falling from your lips.’ And this man is very happy.

“But, I have not advised anybody to go into medicine. And I have not advised anybody *not* to go into medicine. I personally feel like ‘what else is there?’ Coming to the end, closer to the end, of a career as a general practitioner, I still feel that this is The Queen of all professions. That this is something that is so much greater than the sum of all its parts. That you can serve medicine but you can never conquer medicine, and all you can be is a walking disciple. And I wouldn’t do anything else if I could.

“In fact, another degree of my personal richness, I think, is that five years ago, I had spent some time regarding the practice of medicine as a great drudgery at times. You know, I had to get out. And all of a sudden 5 years ago I realized that I was not locked into medicine. That financially I could live better with writing and the speaking circuit than I could practicing medicine. And all of a sudden it was as though a load had been lifted and some gates had been swung wide, and I realized, quite freely and spontaneously, that I didn’t want to do anything but practice medicine as long as the kids would let me. It’s like if somebody comes to you and asks, ‘Do you think I ought to get married?’ you just say ‘no.’ I mean, if they should they wouldn’t be asking. If somebody came to me and asked, ‘Do you think I should study medicine,’ I would say ‘no.’ I still have young people who come to me and say ‘I want to be a doc-

tor.' And I encourage the hell out of them. I think it is great.

"And when you...talk about third party coverage, about Medicare and Medicaid, all this sort of stuff, I have yet to see a starving doctor. You don't make a million at it, no matter what scheme it advances under. I don't know of anything that puts you in such a position where you are privileged to savor the mountain ecstasies and the deep valley glooms that every human life experiences. I am a servant of medicine, and always will be. I would encourage any young person who wants to be a doctor to step forth and be the best one he possibly can. Wouldn't you?"

And so it is that an old year ends and a new year begins. A new year full of uncertainty, full of unpredictability, full of challenges. My God, I can hardly wait!



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Make a donation to the Nongame Wildlife Fund by checking line 26 (long form) or line 6 (short form) on your state income tax form. Your contribution will help the southern bald eagle restoration efforts currently going on throughout the state. Without your help, eagles may vanish forever from Georgia.

Georgia Nongame Wildlife Program



Department of Natural Resources
205 Butler Street., S.E., Suite 1252
Atlanta, GA 30334



Birdwatchers Take Note

Hummingbirds and bluebirds are among wildlife observers' favorites.

The Nongame Wildlife Program is working to Bring the Bluebird Back and conducting a Hummingbird Helper Survey. Both projects are essential to the future of these two beautiful birds, and you can help.

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Georgia Nongame Wildlife Program

Department of Natural Resources
205 Butler St. SE · Suite 1252 East Tower
Atlanta, GA 30334

Georgia's Nongame Wildlife Program

Keeping Georgia Wild

By the end of this decade, Georgians will lose more than two million acres of rich natural areas – areas that offer a home to hundreds of species of animals and thousands of species of plants. As agricultural use and urban development expand, more and more prime habitat vanishes. **Only eight percent** of the state is protected and will never be developed.

The **Georgia Nongame Wildlife Program** is working to keep Georgia wild! The Nongame Program will help fund the acquisition of Little Tybee and Cabbage Islands off the Georgia coast, to be protected by the Department of Natural Resources.

If you are concerned about our disappearing natural resources and vanishing wildlife, you can help!

It's easy to contribute to the Georgia Nongame Wildlife Fund through the **state income tax checkoff**. Use line 26 (long form) or line 6 (short form) on the state income tax form to make your donation.

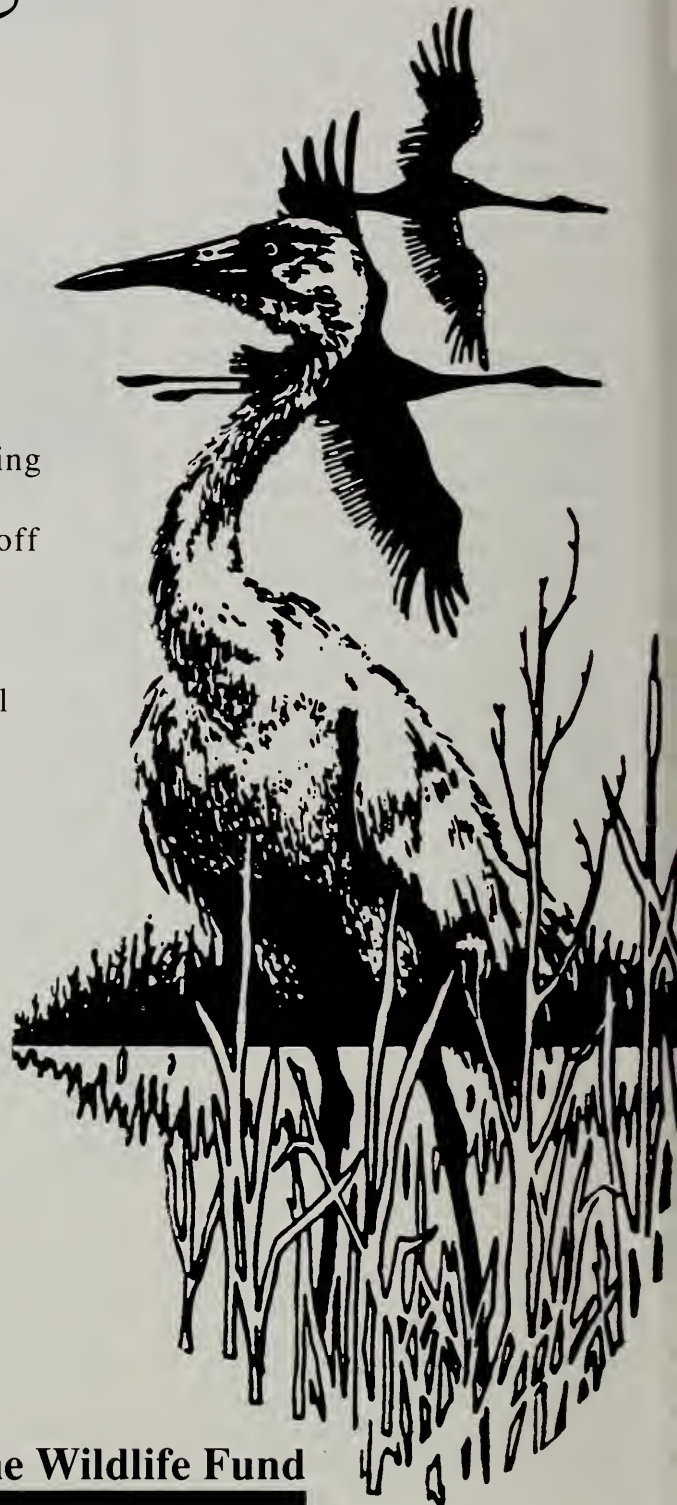
Your contribution will be used to continue land acquisition projects and many other programs designed to protect, manage and preserve Georgia's nongame wildlife.

Help keep Georgia wild!



Support Georgia's Nongame Wildlife Fund

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Suite 1252-East Tower • 205 Butler Street, S.E.
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Cost to Society High for Bogus DME Orders

Donald C. Chait, MD

HOW WOULD YOU feel if someone stole your wallet, spent your money, and ran up huge credit card bills using your good name? Indignation? Outrage? Relief because there's a cap on your personal liability for unauthorized credit card charges?

There's a new breed of mugger sweeping the land. He's stealing our tax dollars and getting very rich off the pain and suffering of those who need medical assistance the most — Medicare recipients. He's using our good names as physicians to make huge profits that aren't earned. There's no relief in sight unless we do our part to prevent the crime.

Medicare fraud. That's what you call it when a few unscrupulous durable medical equipment (DME) suppliers are allowed to make enormous amounts of money selling equipment that is of questionable benefit to patients. Take, for example, the case of Queen City Medical Equipment Company in Ohio, which heavily promoted seat-lift chairs via advertising, direct mail, and random telephone solicitation. By the time Queen City Medical was convicted of mail fraud and conspiracy in 1989, it was collecting \$30 million annually from Medicare for equipment that was often unnecessary and seldom delivered to patients for whom it was authorized. In many cases, doctors' names on certificates of medical necessity had been forged.

‘At \$30 million a clip, it's no wonder Medicare's expenditures for DME are soaring to nearly \$3 billion annually. The longer it takes to find and prosecute unscrupulous companies, the greater the drain on an already overburdened tax base. 9

At \$30 million a clip, it's no wonder Medicare's expenditures for DME are soaring to nearly \$3 billion annually. The longer it takes to find and prosecute a company such as Queen City Medical, the greater the drain on an already overburdened tax base.

Companies such as Queen City Medical are operating in Georgia. For example, some time ago a patient of mine received a call from someone who asked if he would use certain orthopedic appliances

if his doctor recommended them. The patient, who had indeed fallen, had been seen in an emergency room and suffered from a limp, said "yes." Since I was aware of this patient's condition, I did not give a second thought to signing the authorization for these orthopedic appliances when the form crossed my desk. I only learned later that the patient's limp had cleared spontaneously and that he had been supplied with about \$900 worth of unnecessary appliances that he neither wanted or used.

Subsequently, I have received similar requests for authorization from this same DME supplier involving my patients who, in some cases, were told that I had recommended the appliances. I no longer approve any requests from this particular company and have, since the original episode, watched very carefully to make sure requests for both DME and for home nursing are legitimate. I understand, however, that this DME company is doing a booming business in Georgia. Various authorities are aware of that company's activities, but it will take many complaints to justify prosecution. No legal action has been possible to date.

We as taxpayers should be outraged by this waste of Medicare dollars. As physicians, we should feel indignant because our good name on a form can open doors to great wealth for common criminals. The real victims, however, are the el-

Dr. Chait is an Atlanta internist specializing in hematology and oncology. Atlanta public relations consultant Martha J. Foster served as co-author. Send reprint requests to Dr. Chait, 478 Peachtree St., Suite 507-A, Atlanta 30308.

derly, the disabled, and children who desperately need publicly funded medical care and equipment. Medicare fraud ultimately threatens our ability as a society to take care of those who need help most.

“I no longer approve any requests from this DME supplier and have, since the original episode, watched very carefully to make sure requests for both DME and home nursing are legitimate. I understand, however, that this DME company is doing a booming business in Georgia.”

Sophisticated marketing techniques make it easy for dishonest DME companies to find Medicare recipients. They prey on patients' trusting nature to peddle equip-

ment that is “free” under Medicare. They make bold promises of increased independence, improved mobility and relief from chronic pain and suffering. (See related story, “How to Rip-off Medicare,” page 23.) Medicare fraud investigators even cite examples of elderly patients being mailed a box containing a pan, some wax, a heating unit, and minimal instructions so they can do their own paraffin baths for arthritic joints or bursitis at home. Would you want your patients with reduced sensation self-administering paraffin therapy after the wax has been melted in a unit that can be turned up as high as 145 degrees?

There's very little we can do to prevent criminals from forging our names on certificates of medical necessity if they are unethical enough to do so. Individual physicians can, however, make a difference.

Call the Medicare fraud hotlines if you notice: a sudden increase in the volume of medical necessity forms crossing your desk for selected types of adaptive aids; requests for equipment that you haven't discussed with your patient and that might be of questionable value to them; you've never heard of the DME company, and the only

return address is a post office box number; a qualified orthopedist, physiatrist, or other specialist should have been involved in evaluating the patient and fitting the equipment, and there is no evidence this has taken place.

Retain these numbers for future reference and call them if you suspect DME fraud for any reason:

**MEDICARE FRAUD
INVESTIGATOR, 404-331-2131**
Atlanta Regional Office of the
Inspector General
Department of Health and Human
Services
P.O. Box 2288
Atlanta, Georgia 30301

**MEDICARE FRAUD HOTLINE,
800-368-5779**
Inspector General's Office of
Department of Health and Human
Services,
Baltimore, Maryland

Members of Congress are also actively investigating Medicare fraud resulting from improprieties by DME suppliers. To offer your support, or learn more about what is being done, contact the Senate Select Committee on Aging, Sen. William Cohen of Maine, 202-224-2523.

Push and Pull:

A Look at the 1992 Georgia General Assembly

Cynthia Haney

PUSH, n. One of the two things mainly conducive to success, especially in politics. The other is Pull.

Ambrose Bierce
The Devil's Dictionary

THE 1992 GEORGIA GENERAL ASSEMBLY goes into Session on January 13th with no money, low morale, and a citizen agenda to "throw the rascals out." Small wonder 1992 is already being referred to with shaking heads and rolling eyes. 1992 is a "carryover" year, referring to the second year of a 2-year term. Therefore, any bills from 1991 that were not passed, defeated, or otherwise resolved remain on the table for 1992. In addition to the large number of health care related "carryover" bills, a flood of new legislation will be introduced that will require our input and vigilance. The added fact that 1992 is an election year, on top of the as yet unresolved politics of reapportionment and budget shortfall, will make for an unstable political environment in which all this legislation is heard and voted upon.

MAG's 1992 legislative agenda

may be conceptually divided into six categories: Tort reform; Allied health professions; Maternal and infant health; Third party reimbursement and insurance; "General items" (many of which are House of Delegates mandates); and Carryover bills from 1991.

This agenda was developed from a variety of sources: MAG House of Delegate Actions from 1990 and 1991; meetings of the MAG Council on Legislation; Health Access Georgia recommendations; and responding to legislation proposed by other groups and individuals. Physicians have been criticized in the past by some legislators for being reactive rather than proactive in our legislative activities. While there will always be an element of reactivity in our programs — generally in responding to legislative initiatives by the allied health professions — the 1991-92 MAG agenda reflects a positive, proactive, aggressive approach to problem solving in the health care arena. The following discussion highlights some of the more high profile pro-

posals MAG will be addressing this year.

Tort Reform

Once again, tort reform will be high on physicians' agenda. But we are not alone this time. MAG has spent the last several months building coalition support for our tort reform proposals with representatives from the hospital industry, business, insurance, and consumer groups, so that our collective voice will be heard under the Gold Dome. Reform of Georgia's tort law must be implemented to reduce the cost of health care, medical malpractice premiums and the even greater cost of "defensive medicine," i.e., tests or procedures performed primarily because of liability concerns.

The highlights from the tort reform agenda are: reinstatement of the collateral source rule, modification of the medical "standard of care," and modification of the qualifications for expert witnesses. The LEGAL article this month focusses on the specifics of these proposals as well as describing in full the remainder of our tort reform agenda.

Ms. Haney is MAG's Associate General Counsel.

Allied Health Professions

MAG continues to oppose efforts by groups who would like to practice medicine with a "license" conferred by legislation rather than by education at a medical school. Many times, this opposition is characterized as physician "turf protection" by the groups seeking certification or expanded scopes of practice. The fact is, however, that "scope of practice" for any medical professional defines the level and focus of training that the individual has received. Most allied health professionals are very good at what they do; the key is to allow them to do what they have been trained to do, and no more. The health of the patient is compromised when he or she is "treated" by a health care provider who does not have the training to diagnose and treat — a provider who is likely to overlook critical information because he or she is not trained to recognize it. The characterization of doctors engaging in "turf protection" is wrong and unfair; the physician community needs to work at educating its patients on this issue.

Some of the groups we are expecting to battle this year include chiropractors, psychologists, physical therapists, lay midwives, acupuncturists, massage therapists, and physician's assistants. "Round up the usual suspects." Of particular concern is a bill to be introduced by the chiropractors which would entirely rewrite their practice act to allow them lab privileges, the ability to order or perform virtually any medical diagnostic test, and the ability to examine any orifice of the body. (Chiropractor-gynecologists? It's possible under this legislation.)

The lay midwives (also referred to as "granny midwives" or "direct entry midwives") are attempting to end-run a Department of Human Resources ruling that one must meet the requirements of certified

nurse-midwifery to practice as a midwife under Georgia law. The Cobb County legislative delegation is taking the lead in stopping the practice of lay midwifery, and MAG will be supporting their efforts in the General Assembly. Another very active group is the acupuncturists, who are seeking their own Board and independent practice in Georgia. Currently, only M.D.s may practice acupuncture under Georgia law; the Medical Practice Act also allows physicians to directly supervise in-office acupuncture by non-M.D.s. MAG is opposing any loosening up of this present regulation.

Maternal and Infant Health Care

Georgia is ranked 50th of the 50 states in infant mortality and morbidity. Only the District of Columbia ranks worse. MAG is committed to working with the Georgia Department of Public Health, the Georgia Department of Medical Assistance, and other groups to produce a joint solution for this serious problem. One of the keys for medicine will be in developing incentives for physicians to treat indigent pregnant women and their babies. One of MAG's legislative proposals designed to create such an incentive is the expansion of Georgia's "Good Samaritan" law, such that physicians who provide free care will receive certain liability protections.

As part of MAG's Health Access Georgia pro-active plan for quality care and cost-containment, medicine will be supporting legislation calling for mammograms and Pap smears to be added to the list of covered services under Georgia law. This support does not controvert MAG's past opposition to mandated providers (as opposed to services). The benefit to the health care system — both in long-term monetary savings and in early detection and prevention of disease

— outweighs the initial cost burden.

Third Party Reimbursement and Insurance

Third party reimbursement issues will again be a major issue before the General Assembly. It seems as though everyone wants to cut costs by demanding more services while paying physicians less. Furthermore, those whose health care services are not currently reimbursable are seeking to legislate the terms of insurance policies to accommodate their vocation. After many years as chairman of the House Insurance Committee, State Representative Crawford Ware passed away and has been replaced by Representative Wesley Dunn of McDonough. Chairman Dunn has shown a receptivity to medicine's message in the past, and we look forward to working with him.

The most important of the insurance initiatives on the table from last year is SB 292, which would remove the 70% floor on the PPO reimbursement differential between participating and non-participating physicians. MAG is strongly opposed to SB 292. The current 70% differential, wherein the patient is responsible for up to 30% of the physician's fee if that patient chooses to see a non-participating physician, creates an incentive for patients to stay within the PPO but does not remove patient choice. Under the proposed legislation, this incentive becomes a coercive tactic which would totally remove patient choice and greatly reduce access to physicians, particularly in non-urban areas. Although the business community is working with MAG on tort reform this year, the Business Council of Georgia, the Association of Health Care Coalitions, and the insurance industry (especially Blue Cross/ Blue Shield, Travelers, and HIAA) are spearheading the effort to pass this dan-

gerous legislation. Expect a heated battle.

A second critical reimbursement issue for medicine this year in Georgia is our attempt to overcome the current insurance industry policy of refusing to honor the assignment of benefits by a patient to a physician. Representative Wesley Dunn will be sponsoring a bill in the opening days of the 1992 Session to help us accomplish exactly this. Your support and efforts in educating legislators on this issue is strongly urged. Additional proposals on the insurance front include an overhaul of the state workers' compensation system and of the state merit system health benefit program. MAG will be monitoring both of these projects.

General Items

The following highlights several of the proactive legislative proposals that MAG will be pursuing this year, many of which are directives from our House of Delegates. At the head of the list is the implementation of MAG's Health Access Georgia, our pro-active statement on access, cost-containment and the delivery of quality health care for all Georgians. Many of the legislative initiatives already discussed reflect portions of MAG's 19-point plan.

Utilization Review

Under the category of "the continuing saga of..." we find Utilization Review (UR) funding and rulemaking. MAG was successful in passing 1990 legislation that regulates UR companies in an attempt to stop some of their abusive practices. Funding for the legislation was abruptly vetoed by then-Governor Harris. Governor Zell Miller subsequently helped MAG to reinstate funding for the bill, with the support of Lt. Governor Pierre Howard and Speaker of the House Tom Murphy. The funding was protected during the 1991 Special Session budget slashes through constant

vigilance on the part of MAG's legislative staff. The rules implementing the UR regulation legislation still need to be adopted by the Department of Insurance. The insurance industry's attempts to remove the funding during the state's continuing budget crisis must be vigorously fought on all fronts.

A Separate Medical Board

MAG is also spearheading an initiative which calls for a separate Medical Board, pulled out from the administrative umbrella of the other state boards, which would be staffed by separate investigators dedicated to reviewing only physician-related concerns. Currently, the Composite State Board of Medical Examiners has to share attorneys, investigators, and other staff with other disparate state "boarded" groups such as landscape architects, cosmetologists, and used car dealers. Clearly, the potential for public harm presented by an inferior doctor is exponentially greater than that presented by, say, a wayward landscape architect. Physicians are willing to subject themselves to the strictest scrutiny to deal with incompetent or impaired colleagues, but must have the personnel and tools available to efficiently and effectively police the profession.

AIDS Testing

AIDS testing is another area of controversy that will be addressed in the 1992 Georgia General Assembly. MAG has developed and adopted an AIDS policy that has as its goal treating HIV infection as a disease, rather than as a social issue. Physicians should have the right to order HIV tests for patients and health care workers alike, as they would any other diagnostic test. Professional medical judgment, not social engineering, should be the criterion on which the decision to test or not to test should be made. MAG will be work-

ing with Senator Charles Walker of Augusta, Chairman of the Senate Health and Human Services Committee, to translate this policy into legislation.

Patient Self-determination Act

"Death with dignity" is a subject which has received considerable attention recently as a result of the December 1, 1991, implementation date for the federal Patient Self-determination Act. The Act directs hospitals to inform patients of their rights *under state law* to fill out advance directives informing health care personnel of that patient's wishes regarding medical treatment in the future, should the patient subsequently become incompetent. Georgia's current statutory scheme recognizes the Living Will and the Durable Power of Attorney for Health Care as advance directives; Georgia law also protects health care personnel who implement "do not resuscitate" (DNR) orders. These three laws, particularly the DNR law, require both technical and substantive revision to better integrate a current diversity of terms that reflect the 7-year time span over which the statutes were passed. Look for legislation to accomplish this goal, making it easier for physicians and other providers to follow the law and respect the wishes of patients and their families.

Other Legislative Items

This discussion comes nowhere near exhausting the list of issues with which medicine will be concerned in the 1992 General Assembly. Briefly, we will also be looking at the repeal of certificate of need (CON), the updating of peer review statutes, the limiting of access to medical records by insurance companies and the regulation of quick weight loss programs. We will also be continuing to monitor "carryover" legislation from last year, including organ donation and au-

topsy law, changes in the composition of county boards of health, occupational tax threats, and revision of the state trauma/emergency plan, among others.

Your Role as Advocate

You almost certainly are familiar with the truism that "all politics is local." Think about it. Legislators are decision-makers on behalf of a select geographic constituency whom they must serve. Your Senator and Representative are accountable to you, and if you feel they have inadequately represented your interests, you have the choice of educating them as to your point of view or electing someone else.

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Medicare Rip-Off: DME Fraud Bleeds the System

Martha J. Foster

TELEMARKETING. It's as much a part of life as junk mail these days. Few find it hard to hang up on telephone solicitors hawking everything from pre-approved credit cards to timeshare condos in Cancun.

Unfortunately, sometimes the most vulnerable consumers — the elderly and unemployed citizens with disabilities — are getting offers they find much harder to refuse. Although methods vary, Bob Noble, an inspector in the health care unit in the Department of Health and Human Services' Inspector General's Office in Washington, DC, says the sales pitch often goes something like this:

"Mrs. Smith, I'm doing a survey for the government to make sure you are getting all you are entitled to from your Medicare benefits. You are enrolled in Medicare, aren't you?" (The caller suspects she is, because Mrs. Smith has already been pre-qualified as someone who subscribes to senior citizens' magazines, is a member of a seniors' discount shopping club, lives at a retirement community address, or meets other demographic profile standards that are readily

available from mailing list brokers.)

"Very good, Mrs. Smith. My company has a terrific deal with Medicare that allows us to evaluate your needs. If you need it, we can get you free durable medical equipment (DME) that can make your life a whole lot better." (If she takes the bait, the "concerned" caller will soon know her entire medical history, what DME she owns, and will know the right buttons to push to prey on her trusting nature. He might actually invite Mrs. Smith to his store to shop for her free equipment, but in truth all he wants is her Medicare number, her doctor's name, and enough information about her ailments to fill out a certificate of medical necessity form that will look legitimate to her doctor.)

"I believe you really need some things. You might hurt yourself and have to be hospitalized if we don't upgrade your equipment. I'll make arrangements with Medicare and

your doctor for X,Y and Z equipment to be shipped directly to your home at no charge to you."

Unless the DME company gets too greedy, there's a good chance the equipment list submitted to Mrs. Smith's doctor for approval will look perfectly plausible. The DME company counts on it that a certain percentage of busy doctors will approve the certificate of medical necessity if the equipment can do no harm to the patient and the patient seems to want it.

Fortunately, most DME suppliers are good and ethical people, but the problem is not simple. With the stroke of a doctor's pen, or the indiscriminate use of a signature stamp by an office assistant, a few bad apples in the DME industry can make enormous amounts of money on equipment that patients might not even need. There's also risk patients can get hurt if the DME doesn't fit right, or they are not trained to use it properly. (See related editorial, page 17.)

Mr. Noble acknowledges that doctors are placed in an awkward position if they refuse to approve DME for their patients. "If he refuses to sign, the DME company will

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threaten the doctor in a number of ways," Mr. Noble explains. "They may threaten a restraint of trade action against the doctor, hoping he won't want to be bothered with a suit. They may threaten to take the request to another doctor if he won't cooperate, hoping that the doctor won't want to risk losing the patient. If neither of those tactics work, the next step is to forge the doctor's name."

Are Physicians Liable?

Mr. Noble says under current regulations, a physician could lose the right to participate in the Medicare program if he or she routinely approves supplies that are not needed. He hastens to add, however, that physicians are seldom the problem. Most are eager to offer to help.

"We rely on a physician's knowledge of his patient's needs," Noble said. "If we suspect that a DME supplier is operating unethically, we call doctors to verify they approved the equipment, ask if they saw the patient and what led them to sign

the certificate of medical necessity. Most are very willing to help us. They know these companies are making money on their good name, and they don't like it, either."

Because DME fraud is growing, the Healthcare Financing Administration is reviewing tighter standards for DME purchases funded by Medicare. If accepted, the change could make doctors more directly accountable for what they sign.

"Right now, only certain types of DME, such as oxygen supply equipment, have a formalized certificate of medical necessity that includes a penalty clause," Noble said. "If the Health Care Financing Administration makes that type of document necessary for all types of equipment across the board, a doctor who makes a false statement could be prosecuted. That's not the sole intent of the proposed regulation, but it's one of the possible side effects."

Nationally, Medicare expenditures have grown from \$100 to

\$115 billion in the past two years. Although DME expenditures are a relatively small slice in the Medicare budget pie, the tab for DME approached \$3 billion last year alone. Tighter controls on the approval process for DME may reduce the problem, but Mr. Noble believes heightened physician awareness is important, too. "We mainly ask that physicians be constantly aware of what they are signing, and that they call the Atlanta regional Medicare office or the national Medicare hotline in Baltimore, MD, (800-368-5779) if they have any reason to suspect fraud. The bottom line is that patients can get hurt by improper equipment, a few unscrupulous DME suppliers are making enormous amounts of money off of physicians' good names, and the problem ultimately threatens our ability as a society to provide equipment for patients who really need it."

Full information on how to spot and report possible DME fraud is provided in Dr. Donald Chait's editorial in this issue.

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Surgical Treatment of Spontaneous Dissection of the Internal Carotid Artery: Case Report and Review

Mark J. Costantino, MD

Case Report

A 44-YEAR-OLD white woman presented with multiple left hemispheric transient ischemic attacks. She had undergone a modified radical mastectomy for breast cancer and was undergoing chemotherapy. The rest of her past history was otherwise unremarkable except for cigarette smoking.

A CT scan was normal. A carotid ultrasound was suspicious for an acute thrombosis or a possible dissection of her left internal carotid artery. A subsequent cerebral arteriogram revealed an apparent dissection of the carotid artery beginning at the bifurcation and extending into the distal internal carotid artery, with no clear cut end point and a near total occlusion of the arterial lumen (Figure 1).

The patient was placed on anticoagulants, first with Heparin and then Coumadin (sodium warfarin). She remained asymptomatic while on Coumadin; however, she eventually could not tolerate it because of bleeding complicated by her chemotherapy. The Coumadin was discontinued approximately 1

Surgical intervention should be reserved for patients whose condition is unstable, who do not tolerate anticoagulation, or who have short segment dissections.

month after her initial TIA. She immediately experienced recurrent episodes of right-sided weakness and dysphasia. A repeat ultrasound was normal. A repeat cerebral arteriogram showed an open artery with a filling defect high in the cervical portion of the internal carotid artery (Figure 2).

Subsequently, the patient underwent a carotid endarterectomy at which time an apparent carotid dissection was noted with a sealed proximal intimal tear and a distal

re-entry point with loose thrombus which appeared as the filling defect noted on the arteriogram (Figure 3). Her postoperative course was unremarkable, and she remains asymptomatic at 6 months follow up.

Discussion

Spontaneous dissection of the internal carotid artery was first described by Anderson and Schechter in 1959.¹ Since that first report, there have been numerous case reports in the medical literature.²⁻¹⁴

The etiology of most dissections of the internal carotid artery are traumatic injuries; however, there are many cases in which no clear etiology or history of trauma can be identified. Fibromuscular dysplasia or cystic medial necrosis is suspected in some cases. In most cases, however, no obvious arterial pathology can be identified.^{4,15} Hypertension does not seem to be a significant contributing factor and atherosclerosis is usually not present. Histologic examination of specimens generally reveal the dissection to be in the outer layer of the media and decreased amounts

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Figure 1. Initial arteriogram. Note distal dissection.

of both smooth muscle elements and elastic tissue are noted.¹⁶

The clinical presentation of these patients varies. Most patients present with a neurologic deficit, with approximately 85% having had transient ischemic attacks or a completed stroke. Other symptoms include neck pain, headache, tinnitus, or neck swelling. Many dissections are probably silent. The clinical course of these patients is variable and many seem to resolve spontaneously.

Diagnosis is generally by angiography but may be suspected by Duplex Ultrasound Scanning as it was in the case presented. The arteriogram may show a smooth tapered stenosis beginning in the common or internal carotid arteries extending into the distal vessels or terminating in a total occlusion of the artery.¹⁷ This spiral dissection or "string sign" may extend distally into the intracranial portion of the artery.¹⁸ The contralateral artery is usually normal but may show fibo-

muscular dysplasia or atherosclerosis. Bilateral dissections are rare but have been described.¹⁹

The natural history of carotid dissections is not clearly understood, but many resolve spontaneously. When this entity was first recognized there was some enthusiasm for early surgical intervention. Dissections were frequently difficult to repair or inoperable, however, due to extension of the dissection beyond the limits of the surgical field. Many patients responded to anticoagulation and the use of intravenous Heparin followed by the oral administration of Coumadin. This seems to be the current standard of treatment.⁶

Totally occluded arteries clearly require no surgical treatment and the main concern is with the patient who is neurologically unstable and has an artery which is not totally occluded. Frequently, these patients respond to anticoagulation, and with time the intramural hematoma resolves or stabilizes. Patients who do not improve with anticoagulation or who are unable to tolerate anticoagulation present a particularly difficult problem. Many surgical techniques have been described to treat carotid dissections including resection of the segment of artery involved with an interposition bypass graft, dilatation of the artery, and ligation of the artery.¹⁶ In the case described, a standard endarterectomy was possible though the lesion extended quite high into the distal internal carotid artery.

Conclusions

Spontaneous dissections of the internal carotid artery are unusual lesions which frequently do not have a recognized etiology. Diagnosis can occasionally be made by ultrasound but usually will require angiography. Treatment is generally with anticoagulation. Surgical intervention should be reserved for unstable patients who are not re-



Figure 2. Repeat arteriogram. Note filling defect distal internal carotid artery.

sponding to treatment or not tolerating anticoagulation or in patients who have short segment dissections which can be approached by standard surgical techniques. Carotid dissections are not stable lesions and can change dramatically or resolve completely as demonstrated by serial angiography.

References

1. Anderson R, Schechter M. A case of spontaneous dissecting aneurysm of the internal carotid artery. *J Neurol Neurosurg Psych* 1959;22:195.
2. Gee W, Kaupp HA, McDonald KM, Lin FZ, Curry JL. Spontaneous dissection of internal ca-

rotid arteries. *Arch Surg* 1980;115:944.

3. Ehrenfeld WK, Wylie EJ. Spontaneous dissection of the internal carotid artery. *Arch Surg* 1976;111:1294.

4. Fisher CM, Ojemann RG, Roberson GH. Spontaneous dissection of cervicocerebral arteries. *J Can Sci Neurol* 1978;5:9.

5. Friedman WA, Day AK, Guisling RG, et al. Cervical carotid dissecting aneurysm. *Neurosurg* 1980;7:207.

6. McNeill DH Jr, Driesbach J, Marsden RJ. Spontaneous dissection of the internal carotid artery. Its conservative management with Heparin sodium. *Arch Neurol* 1980; 37:54.

7. Mokri B, Sundt TM Jr, Houser OW. Spontaneous internal carotid artery dissection, hemicrania, and Horner's Syndrome. *Arch Neurol* 1979;36:677.

8. Brice JG, Crompton MR. Spontaneous dissecting aneurysms of the cervical internal carotid artery. *Br Med J* 1964;2:790.



Figure 3. Surgical specimen showing filling (thrombus).

9. Bostrum K, Lilliequist B. Primary dissecting aneurysm of the internal carotid and vertebral arteries. *Neurol* 1967;17:179.

10. Ojemann RG, Fischer CM, Rich JC. Spontaneous dissecting aneurysm of the internal carotid artery. *Stroke* 1972;3:434.

11. Campbell FC, Robbs JV. Spontaneous dissecting aneurysms of the internal carotid artery. *J R Coll Surg Edinb* 1981;26:286.

12. Bradac GB, Kaembach A, Bulk-Weischedel D, et al. Spontaneous dissecting aneurysms of the cervical cerebral arteries. Report of six cases and review of the literature. *Neuroradiol* 1981;21:149.

13. O'Dwyer JA, Moscen W, Trevor, et al. Spontaneous dissection of the carotid artery. *Radiol* 1980;137:379.

14. Epstein MA. Spontaneous carotid artery dissection in a 38-year-old man. *Postgrad Med* 1980;68:103.

15. Anderson CA, Collins CJ, Rich NM, et al. Spontaneous dissection of the internal carotid artery associated with fibromuscular dysplasia. *Am Surg* 1980;46:263.

16. Krupski WC, Effeney DJ, Ehrenfeld WK. Fibromuscular dysplasia, aneurysms, and spontaneous dissection of the carotid artery. In: Bergan JJ, Yao JST, eds. *Cerebral Insufficiency*. New York: Grune and Stratten, 1983:376-383.

17. Lilliequist B. The Roentgenologic appearance of spontaneous dissecting aneurysm of the cervical internal carotid artery. *Vasc Surg* 1968;2:223.

18. Mehigan JT, Olcott C. The carotid "string sign". Differential diagnosis and management. *Am J Surg* 1980;140:137.

19. Loyd J, Bannon HT. Bilateral dissecting aneurysms of the internal carotid arteries. *Am J Surg* 1971;122:549.



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AIR FORCE RESERVE

Rescuing Tort Reform

James D. Comerford

de-fen-sive med-i-cine n. those actions taken by a physician or other health care provider for the purpose of deterring legal claims rather than primarily for the promotion of the patient's health. ref. definitions of "trial lawyer" and "c.y.a."

The U.S. Chamber of Commerce estimates that defensive medicine cost the nation \$40 billion in 1990. Thus, it could be estimated that \$1 billion was spent in Georgia for defensive medicine procedures, as our state contains 2.5% of the nation's population.

The reduction of defensive medicine costs would be a significant contribution to the total reduction of health care expenditures. To do that in Georgia, we need to support upcoming tort reform legislation and rescue from attack gains we've already made.

The Medical Association of Georgia has been in the vanguard of the battle for tort reform. MAG's efforts will next be focused on five initiatives during the 1992 legislative session: 1) restoration of the collateral source rule; 2) stricter qualifications for expert witnesses in professional malpractice cases; 3) modification of the standard of care; 4) placing time limitations on the length of litigating professional malpractice cases; and 5) placement of caps on pain and suffering awards.

Collateral Source

In 1987, the Georgia General Assembly enacted what has been commonly referred to as the "Tort Reform Act." Among its components was O.C.G.A. Section 51-12-1 (b) relating to collateral source payments.

Collateral source payments are those benefits paid to an injured individual from sources other than those possessed by the party inflicting the injury. They include payments from the plaintiff's insurance, workers compensation, wage loss and income replacement, and social security benefits.

O.C.G.A. Section 51-12-1 (b) provides that if a tort claimant elects to seek "special damages", the jury is entitled to know and consider the extent to which the claimant has received or will receive compensation from collateral sources. If for reasons of strategy or for some other reason, the claimant elects not to seek recovery of "special damages," evidence of collateral source benefits would not be admissible. Thus, an offset of collateral source benefits is not required — a claimant enjoying collateral source benefits would have an opportunity to persuade the jury that any award should not be reduced by such collateral source benefits while the jury has full knowledge of the true extent of the claimants

economic loss and special damage. The fundamental proposition that a claimant injured as a result of someone else's negligence should be fully and fairly compensated is upheld. The law simply provides for making a claimant "whole" without allowing a "double recovery."

The societal benefits realized by excessive collateral source rule as embodied in O.C.G.A. Section 51-12-1 (b) include reduction of damage awards and potential insurance exposure, thus stabilizing insurance costs and increasing insurance availability and facilitation of settlement of tort cases.

The Supreme Court of Georgia has overridden the Legislature's wisdom. In two cases announced during the last hours of this year's legislative session, *Denton v. Conway Express, Inc.* and *Georgia Power Co. v. Falagan*, the provisions of O.C.G.A. Section 51-12-1 (b) were ruled unconstitutional. In the controlling opinion in a 3-2-2 decision, Justice George T. Smith determined that the state constitution's requirement that laws be "impartial and complete." Reasoning that the collateral source provision allows the jury to know only part of the story — what the plaintiff receives, but not what a defendant's insurance company might pay.

The 1992 session of the General Assembly will be the scene of a stiff fight between the business community and organized medicine on

Mr. Comerford is MAG's Legislative Counsel.

one side and the trial lawyers on the other to restore the collateral source provisions of O.C.G.A. Section 51-12-1 (b). If you gain but one thing from this article, it is that you must go see your Legislators and urge them to support this needed legislation. This bill is being co-sponsored by business and insurance.

Expert Witnesses

Presently, the law provides that an expert witness may be qualified solely at the discretion of the trial judge with nothing more required to qualify as expert than education in a particular trade or profession. Additional experience by application of that knowledge to a specific problem is not necessary to qualify one as an expert.

Representative Tommy Chambliss (Albany) has introduced HB 621 for the purpose of restricting expert witness testimony in medical malpractice cases to those witnesses who possess both proper education and experience. The legislation has been rewritten to include all of the professions, thus gaining greater support in the General Assembly. The bill requires that an expert:

- 1) have been licensed to practice the subject profession in Georgia at the time of the incident causing the suit;
- 2) be fully trained and experienced in the area of professional discipline which would be the subject of testimony;
- 3) have been actively involved in the practice of the subject profession for at least 3 of the 5 years immediately preceding the incident, and;

4) if the expert is an academician, at least half of the expert's professional time be spent as an employed member of the faculty of an educational institution accredited for the teaching of the subject profession for at least 3 of the 5 years immediately preceding the incident.

HB 621 passed the Senate as an amendment to another bill in the 1991 Session of the legislature but was ruled as non-germane and ineligible for consideration by House Speaker Murphy. Every effort will be exerted to obtain passage in 1992.

Standard of Care

Presently, the standard of care required to be exercised by a physician is that reasonable degree of care, skill, and diligence exercised by the profession generally under the same or similar circumstances. The jury is allowed to consider the general practices in the subject physician's community in order to determine what is reasonable care. Legislation has been drafted for introduction which would define acceptable professional standard of care as the level of care, skill, and treatment generally practiced by reasonably prudent health care practitioners nationally in the same specialty and under similar circumstances. Presently, a plaintiff must only establish, through expert medical testimony, that the defendant physician failed to exercise the standard of care, as defined above, in order to recover damages. The legislation would raise that barrier to a preponderance of the evidence standard.

Litigation on Time Standards

Criminals have a right to a speedy trial. Why shouldn't doctors? MAG will be sponsoring legislation to mandate the disposition of medical malpractice suits, either through trial, settlement or otherwise, within 2 years of the filing of the original action.

Cap on Pain and Suffering Awards

Georgia tort law does not limit awards for pain and suffering in tort litigation. MAG will be advocating legislation which would cap these awards at \$250,000. Punitive damages are analogous to pain and suffering damages in concept. The Georgia Supreme Court in *Bagley v. Shortt* decided, on September 5, 1991, that O.C.G.A. 51-12-5.1 which limits punitive damages awards to \$250,000. is constitutional. With that decision, a major component of the 1987 tort reform package has been upheld in the face of a concerted attack by the trial lawyers. Let's build on the victory.

The Medical Association of Georgia has diligently pursued every opportunity to gain allies in support of these initiatives. We are proud to be joined by the Association of Georgia Health Care Coalitions, the Business Council of Georgia, Blue Cross/Blue Shield of Georgia, Georgia Liability Crisis Coalition, and the Georgia Hospital Association in pursuit of passage of this vital and necessary package of legislation.

Diagnostic and Therapeutic Considerations in the Management of Atrial Fibrillation

Mark E. Silverman, MD

“There is no ailment in which such success can be achieved, no other cardiac disease which may be so speedily benefitted, as the well-managed case of auricular fibrillation. In no other affection can the medical attendant point with more thorough confidence to the effects of his remedies. As a direct result of active treatment the moribund may be restored and many years may be added to their lives.

Thomas Lewis, MD, DSc, MRCP
Clinical Disorders of the Heartbeat
Chapter 6, p. 86, 1912

Atrial fibrillation, known as delirium cordis, pulsus perpetuus irregularis, and rebellious palpitations to physicians before the 20th century, is a common rhythm disorder, occurring in 1-1 1/2 million Americans above the age of 60. Because it is often associated with symptoms, complications, and a doubling of the mortality compared with patients who are in sinus rhythm,¹ the physician is confronted with a number of important diagnostic and therapeutic decisions in the management of these patients. This review will pose the questions that each physician must ask and provide some answers based on recent information.

What is the Differential Diagnosis?

The differential diagnosis for atrial fibrillation includes the fol-

lowing: hypertension, valvular heart disease, coronary artery disease, chronic lung disease, sick sinus syndrome, cardiomyopathy, alcohol use, thyrotoxicosis, Wolff-Parkinson-White (WPW) syndrome, pericarditis, pulmonary emboli, pneumonia, myocardial infarction, post cardiac surgery, exercise or heightened sympathetic stimulation, and vagal stimulation.¹ In addition, a number of patients have no apparent etiology and are classified as “lone” atrial fibrillation. Hypertension and alcohol use occur frequently in many patients. Elderly patients without apparent etiology may have atrial fibrillation on the basis of a “sick sinus syndrome.”

What is the Initial Evaluation?

Atrial fibrillation is often subdivided into valvular and nonvalvular types. The history and the exam are helpful in seeking evidence for many of the etiologies listed above. The laboratory evaluation usually includes a chest x-ray, electrocardiogram, echocardiogram, and thyroid function tests including a TSH

level. An ambulatory electrocardiogram may be helpful in searching for paroxysmal atrial fibrillation.

How is the Heart Rate Controlled?

Digitalis is the time-honored drug that has been used with confidence for more than 2 centuries to slow the ventricular response to atrial fibrillation. By its vagotonic effect on A-V nodal conduction, digitalis is often effective in controlling the ventricular rate at rest and in patients with an inactive life style. However, a rapid ventricular rate response to sympathetic stimulation, such as vigorous activity or acute disease, is often better controlled with a beta blocker or calcium channel blocker.² This may or may not be used in conjunction with digitalis.

In the patient with WPW syndrome and atrial fibrillation, digitalis and calcium channel blockers may cause a rapid ventricular rate and serious hemodynamic effects and should be avoided. Cardioversion or intravenous procainamide are the usual choices in this setting. Digitalis can be used to convert new onset atrial fibrillation, but it is uncertain whether it is any more effective than placebo or other drugs. Digitalis may not be effective in controlling the initial ventricular rate in patients with paroxysmal atrial fibrillation, probably because an increased sympathetic tone is present at the onset.³

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Articles for the HEART department are sponsored by the American Heart Association, Georgia Affiliate. Send contributions to Dr. Robert Schlant, Professor of Medicine (Cardiology), Emory University School of Medicine, 69 Butler St., Atlanta 30303.

Should the Patient be Cardioverted to Sinus Rhythm?

Atrial fibrillation has two important consequences that are potentially deleterious to the patient. The first is the hemodynamic effects of the rapid ventricular rate, shortening of diastole, and loss of atrial systole. Many patients will experience palpitations, easy fatigue, and shortness of breath, especially with exercise. These effects are more pronounced in patients who have underlying heart disease.

The second clinical problem is the association of atrial fibrillation with a systemic embolus.¹ About one-third of patients with atrial fibrillation will eventually have a stroke, an incidence of 3-8% per year. In addition, there is a 20-35% occurrence of a silent stroke documented on CT scans.⁴ The incidence of stroke is greatest within the first year after onset of the atrial fibrillation, especially in patients over age 70. The stroke is often devastating, with a 71% incidence of mortality or a permanent deficit. In the first year after a stroke, there is a 15-20% recurrence rate of a second stroke. The incidence of stroke is low in patients under age 60 with nonvalvular atrial fibrillation but remains a potential problem, especially in patients who have valvular heart disease.

Because of the hemodynamic effects and risk of stroke, the majority of patients with recent onset atrial fibrillation should be cardioverted. If the atrial fibrillation has been present for more than a year, the likelihood of maintaining sinus rhythm is slim. The indication for cardioversion must be individualized. Elderly patients with atrial fibrillation have a high incidence of a sick sinus syndrome. Because they may develop long pauses with conversion to sinus rhythm, they are often best left in atrial fibrillation.

What is the Best Approach to Cardioversion?

If the patient does not convert with the initial drug used to slow the ventricular rate, an antiarrhythmic agent or cardioversion can be used. The antiarrhythmic choices include quinidine, procainamide, disopyramide, flecainide, propafenone, and amiodarone. Although each of these drugs has shown documented efficacy, the side effects and possibility of a serious proarrhythmia must be considered.

It has generally been my approach to cardiovert the patient with new onset atrial fibrillation electrically without a trial of an antiarrhythmic drug. If the patient does not maintain sinus rhythm and there is a strong reason to convert the patient, an antiarrhythmic drug is tried and the cardioversion repeated, if necessary. My current preference is flecainide if the patient has a normal ventricle and does not have coronary disease. A follow-up treadmill is strongly advised because of the possible risk of sympathetically induced wide complex tachycardia on flecainide.

The type 1A drugs (quinidine, procainamide, disopyramide) have been used for many years but have a higher incidence of side effects and proarrhythmia. Many cardiologists, including myself, feel that patients should be admitted to the hospital and monitored for several days when these type 1A drugs are initially used. Electrical cardioversion is effective approximately 80% of the time. It is recommended that the patient be anticoagulated for 3-4 weeks if the duration of the atrial fibrillation is more than 3 days old. In selected patients, cardioversion can be done in the outpatient setting with careful observation of the patient until the effects of the anesthetic have worn off.

Can Atrial Fibrillation be Prevented?

Type 1A antiarrhythmic drugs increase the percent of patients maintaining sinus rhythm after cardioversion from 30-40% in the untreated group to 50-60% in the treated group at 6-12 months. Avoidance of alcohol and caffeine, control of hypertension, afterload reduction for mitral regurgitation and left ventricular dysfunction seem reasonable but are unproven. A-V sequential pacing has been shown to maintain sinus rhythm in patients with a sick sinus syndrome who have paroxysmal atrial fibrillation.

What is the Approach to Chronic or Paroxysmal Atrial Fibrillation?

In the past, the decision as to whether to anticoagulate or not has been the greatest dilemma that confronts the physician. The results of four recent trials have conclusively shown that anticoagulation with warfarin substantially reduces the risk of cardioembolic stroke with a risk reduction of 67-85%.⁵⁻⁷ Aspirin in a dose of 325 mg. a day was also effective in patients under age 75 in one study with a risk reduction of 58%.⁷

It is my practice to put almost all patients who have chronic atrial fibrillation on anticoagulants unless there is a specific reason not to. Low-dose anticoagulation with a prothrombin time in the range of 1.2-1.5 times control (international normalized ratio of 2-3) is recommended and reduces the risk of serious hemorrhage, which is seen with prothrombin times kept in a higher range. It is debatable whether or not patients with paroxysmal atrial fibrillation should be anticoagulated. The risk of systemic embolus is low under age 60 but may be high over that age. I put most patients who have frequent

paroxysmal atrial fibrillation on anticoagulants.

Finally, the rare patient with atrial fibrillation and a ventricular rate that cannot be controlled on drugs may benefit from AV nodal ablation and the insertion of a permanent ventricular pacemaker.

References

1. Cairns JA, Connolly SJ. Nonrheumatic atrial fibrillation: Risk of stroke and role of antithrombotic therapy. *Circulation* 1991;84:469-481.
2. Falk RH, Leavitt JI. Digoxin for atrial fibrillation: A drug whose time has gone? *Ann Intern Med* 1991;114:573-575.
3. Galun E, Flugelman MY, Glickson M, Eliakim M. Failure of long-term digitalization to prevent rapid ventricular response in patients with paroxysmal atrial fibrillation. *Chest* 1991;99:1038-40.
4. Feinberg WM, Seeger JF, Carmody RF, Anderson DC, Hart RG, Pearce LA. Epidemiologic features of asymptomatic cerebral infarction in patients with nonvalvular atrial fibrillation. *Arch Intern Med* 1990;150:2340-2344.
5. Petersen P, Boysen G, Godfredsen J, Andersen E, Andersen B. Placebo-controlled, randomised trial of warfarin and aspirin for prevention of thromboembolic complications in chronic atrial fibrillation. The Copenhagen AFASAK Study. *Lancet* 1989;175-178.
6. The Boston Area Anticoagulation Trial for Atrial Fibrillation Investigators. The effect of low-dose warfarin on the risk of stroke in patients with nonrheumatic atrial fibrillation. *N Engl J Med* 1990;323:1505-11.
7. Stroke Prevention in Atrial Fibrillation Investigators. Stroke prevention in atrial fibrillation study. *Circulation* 1991;84:527-539.

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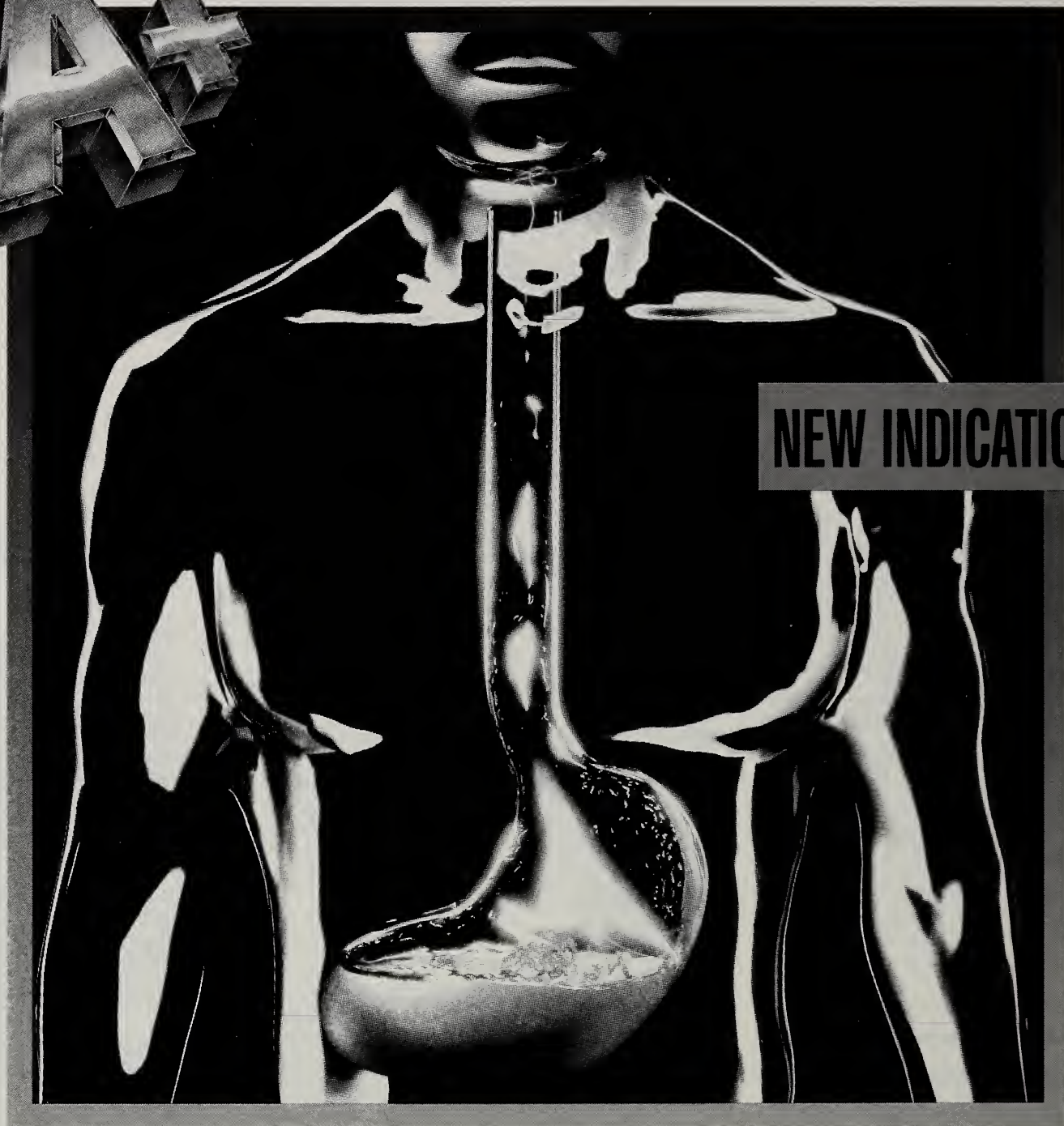
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Indications and Usage: 1. *Active duodenal ulcer*—for up to 8 weeks of treatment at a dosage of 300 mg h.s. or 150 mg b.i.d. Most patients heal within 4 weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a dosage of 150 mg h.s. at bedtime. The consequences of therapy with Axid for longer than 1 year are not known.

3. *Gastroesophageal reflux disease (GERD)*—for up to 12 weeks of treatment of endoscopically diagnosed esophagitis, including erosive and ulcerative esophagitis, and associated heartburn at a dosage of 150 mg b.i.d.

Contraindication: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H₂-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H₂-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix[®] may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chloridazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method. PV 2093 AMP

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AMA Provides AIDS Guidelines for Physicians

There is no proof that any doctor has ever infected a patient with the HIV virus. And yet, ... AIDS is transforming your practice. Fear makes AIDS more overwhelming than heart disease, cancer and traffic fatalities.

The following policies, developed through debate and consensus of the American Medical Association physician leaders, should give you fewer worries and more peace of mind.

AMA physicians urge hospitals, clinics and physicians to adopt routine patient HIV testing ... but not as a substitute for universal precautions. Routine testing should include modified informed consent and re-test and post-test counseling procedures. Patients would not be denied treatment if they refuse HIV testing. Results should be confidential.

Through AMA insurance subsidiaries, the AMA offers HIV insurance available to all doctors, residents or students regardless of age, gender, medical specialty who don't already have the HIV virus. Benefits are designed to provide financial security to doctors who may want to quit or limit practice before they become eligible for disability insurance.

AMA physicians believe that doctors infected with the HIV virus have an ethical obligation to stop performing invasive procedures or must inform patients of their HIV status. The AMA also believes that doctors at risk of infection, because of the nature of their practice or life style, are ethically obligated to be voluntarily tested. Mandatory HIV testing of all physicians is not cost-effective.

The AMA is working to ensure that the federal government increases funding for AIDS research, testing and education. Congress has voted more than \$2 billion this year for AIDS prevention.

The AMA is encouraging state medical associations to review and modify state

laws that restrict the ability of hospitals and other medical facilities to initiate routine patient HIV testing.

The AMA developed and published AIDS guidelines called "HIV Early Care" and "HIV Blood Test Counseling" to help you identify and treat HIV.

The AMA is funding the largest survey of its kind called "HIV Prevention and Treatment Practice of Primary Care Physicians" to collect information about physician knowledge, attitudes and practices regarding AIDS.

Working with the Centers for Disease Control, the AMA has organized a national network of doctors called "Physicians for Youth HIV Education." This outreach network of doctors work with school boards, teacher in-service programs and youth agencies in your local community to teach kids about AIDS.

As your persistent advocate, the AMA maintains that physicians may test for HIV without consent when they have been nicked during surgery and a patient's blood has been exchanged during the incident.

AMA physicians support mandatory HIV testing of military personnel, blood and blood donors, breast milk donors, organs and other transplant tissues, and substances for artificial conception.

In line with the principles of medical ethics, the AMA supports uniform protection, at all levels of government, of the identity of those patients with HIV, consistent with public health requirements.

This article on "AIDS Guidelines" is part of the series which details for you what the AMA is doing about five public health issues. For your free copy of the brochure "Five Issues in American Health," write to the AMA, Department of Membership, 515 N. State, Chicago, IL 60610.



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Issues



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The *MedArt Music and Dance Festival* will be held in major New York City venues and will feature such internationally renowned artists as prima ballerina **Heather Watts** of the New York City Ballet, Bolshoi tenor **Vladimir Bogachov**, the **Chamber Orchestra of the Juilliard School** conducted by maestro **Semyon Vekshtein**, the **Princeton Baroque Ensemble**, the **Children's Orchestra Society**, the **National Dance Institute**, under the direction of **Jacques d'Amboise**, and the **Choeur Classique de Montréal**. The program will include many premiere performances and outstanding soloists, as well as two pop concerts. Miss **Alice Tully** will host a concert in the hall that bears her name.

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Inquiries about the Congress should be directed to *MedArt USA, Inc.*, 433 First Avenue, Suite 200B, New York, NY 10010 (phone 212-998-9397; fax 212-998-9399).

MedArt pledges that this will be a week to remember. Please join us! (*We have secured full video coverage of all events for those of you who are unable to attend.*)

American Medical Association Battles Five Threats to Public Health

Already, AIDS is the leading cause of death among 25-34 year old men in some American cities. Every 15 seconds, an American woman is battered in her home. Far more American teens die from "social morbidities" — vehicle accidents, suicide, violence and depression — than disease. Combined, tobacco, alcohol and drug abuse drain \$130 billion a year in medical expenses, wages and lost productivity. Budget cuts and misguided activists halt research that holds the key for solutions to many diseases that maim, cripple and kill you and your patients.

Five threats to public health. AIDS. Substance abuse. Family violence. Endangered health of specific groups. Medical research at risk.

The American Medical Association fights these five public health crises on many fronts. By testifying and bringing them before Congress. By serving as your law firm in the courts. By developing health care policies to give form and direction to this profoundly changing medical environment. By ensuring excellence at all levels of medical education. By actively practicing medical ethics and principles. Above all, by committing ourselves to our member physicians and their patients.

The AMA is taking the story of their part in this battle to the American public. Physicians who represent AMA members are doing major work in these five areas. Their caring, compassionate concern tells the American public of your larger contributions that go above and beyond the everyday boundaries of your profession ... never losing sight of the welfare of the patient.

Dr. Kenneth Haller, pediatrician, of East St. Louis, Mo.: In one of the nation's poorest communities, Dr. Haller works to save lives of children born addicted to drugs, and to bring dignity to the lives of their parents.

Dr. Aliza Lifshitz, internist, Los Angeles, Ca.: Born and raised in Mexico, Dr. Lifshitz now serves the Hispanic community in Southern California. Over a third of her patients have tested HIV positive. Most live

below the poverty level. Many are illegal aliens.

Dr. Paul Volberding, researcher, University of California, San Francisco, Ca.: Amid the rancor of politics and budget debates, needs of the patient are often overlooked. Dr. Volberding says that "Throughout the history of epidemics, there has been the possibility of reactions and policy based on fear and stigma." Nowhere is this more true than with AIDS.

Dr. Kevin Fullin, cardiologist, Kenosha, Wi.: Why would a cardiologist get involved in the issue of family violence? While others downplay it, Dr. Fullin would not. He petitioned state officials, and through his efforts, the first Domestic Violence Advocate Program in his state was created.

The personal commitment of these physicians is the first step. Through their membership in the AMA, their individual work has a major impact on the health of us all.

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In ads run in *JAMA*, *AMNews*, the AMA's specialty journals, *The New England Journal of Medicine*, and *Medical Economics*, Doctors Haller, Lifshitz, Volberding and Fullin talk about their work and how the AMA and its member physicians support it.

Non-AMA members can return the business reply card requesting AMA membership information. Members can order a free office display for their patients with brochures called, "Why I Belong to the AMA...."

Future monthly issues of "*For Your Benefit*," a joint effort of the AMA and your local medical society, will detail for you what we're doing about these five public health issues. How we can help you and help your patients. To ensure the health of America. To strengthen our medical profession.

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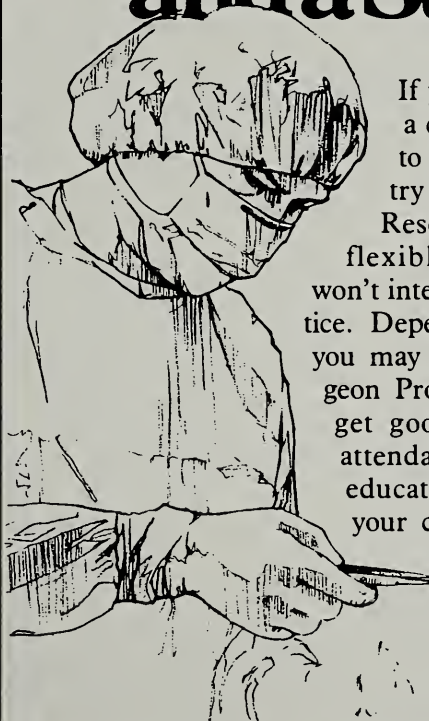
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ADVERTISING INDEX

Advantage Billing Associates	4
American Lung Association	41
American Medical Association	38, 40
American Medical Writers Association	4
CARE	35
Classified Ads	41
Eli Lilly & Company	36, 37
G.D. Searle	44
Georgia Department of Natural Resources	39
Georgia Hospital Association	37
Health Images	7
Health Quip, Inc.	37
Knoll Pharmaceuticals	2, 3
National Council on Patient Information and Education	25
National Rural Health Association	35
MAG Leadership Conference 1992	9
MAG Mutual Insurance Company	6
MedArt International	39
Mississippi Methodist Rehabilitation Center	26
Palisades Pharmaceuticals, Inc.	3
Practice Management Services	12
U.S. Air Force	22
U.S. Air Force Reserve	30, 41
U.S. Army Reserve	11
Vein Clinics of America	43

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MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely to this *Journal*. **Manuscripts should be submitted on a 5¼" disc or a 3½" diskette compatible with IBM WordPerfect 5.1 or in ASCII format. Hard copy (double spaced, typewritten) should be sent with the disc/diskette.** Hard copy should be submitted in duplicate. Receipt of manuscripts will be acknowledged.

STYLE — Articles should range in length from 3000 to 4000 words. Footnotes, references, and photo legends should be typed on separate sheets, double-spaced. References should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages. **Articles with references that do not conform to the *Journal's* style will be returned.**

Sorter NA, Wasserman SI, Austen KF.
Cold urticaria release into circulation of
histamine and eosinophil chemotactic
factor of anaphylaxis during cold chal-
lenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

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Introducing Cardiology 1992

Robert C. Schlant, MD

THE PAST YEAR has continued the rapid acceleration of advances in virtually all fields of cardiovascular medicine. The knowledge explosion in our understanding of the pathophysiology of atherosclerosis and hypertension continues, particularly the growing importance of the endothelium and its many normal functions as well as dysfunctions in disease states such as atherosclerosis. These basic advances will undoubtedly be translated into therapeutics in the next few years.

In this issue of the Journal **Drs. Patterson and Eisner** have provided us with a valuable, concise, and up-to-date review of cardiovascular imaging in 1992. The increasing ability both to image the cardiovascular system and to study the metabolic functions and viability of the myocardium represents major advances that will significantly improve our diagnostic and therapeutic capabilities. Unfortunately, many of the new imaging techniques are very expensive and therefore will be available initially only in tertiary referral facilities.

One of the many problems that still exists in the United States is that too many patients with acute myocardial infarction are either not being treated with a thrombolytic

agent or are being treated later than desirable. Much of this delay is due to the patient's failure to recognize symptoms, either through denial or refusal. Too often, some delay also occurs after they reach a medical facility. In the future, we should all make efforts to initiate therapy within 60 minutes of the onset of chest discomfort in such patients. While there may still be advantages in the use of certain agents, the most important principle is to initiate thrombolytic therapy with any of the three main agents (t-PA, streptokinase, or APSAC) as soon as possible once the diagnosis is made and it is determined that there are no contraindications. **Dr. Houghton** discusses this in her article in this issue. Aspirin (325 mg) should be administered as soon as possible to all patients. Many hospitals in Georgia are currently participating in GUSTO, a study to determine whether or not there is an advantage to t-PA, streptokinase, or a combination of both.

An additional, major advance in

therapeutics in the last year is the evidence of a positive value of the treatment of isolated systolic hypertension in the elderly, which has now been clearly shown to be safe and effective in decreasing the incidence of stroke.

The potential to decrease the progression of coronary atherosclerosis has now been clearly shown in several studies. In some instances, there has even been angiographic regression, although this is not considered necessary for therapy to effect significant decrease in plaque complications leading to recurrent angina or infarction. Most of these studies have employed both diet modification and pharmacologic lowering of serum cholesterol, especially LDL. With the rapid development of new agents to lower cholesterol levels safely and effectively, we should be able to extend this therapy to patients without overt coronary heart disease to prevent its development.

This is truly a golden period of cardiology with many exciting developments at all levels. Hopefully, the economics of medicine will allow us to apply them appropriately to our patients.

Dr. Schlant is Professor of Medicine (Cardiology), Emory University School of Medicine, 69 Butler St., Atlanta, GA 30303. He also serves as Editor of the *Journal's* HEART Section.



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Pay As Much Attention to Firing as to Hiring

Alfred A. Messer, MD

THE TALK at a recent California seminar focused on life and death: of Raymond Thomson, a supervisor for Pacific Southwest Airlines (PSA), and David Burke, an airline employee, fired for stealing \$70.

Just before he died, Thomson received a note from Burke scrawled on an airsickness bag, "Hi, Ray. I think it's sort of ironical that we end up like this. I asked for some leniency for my family, remember. Well, I got none, and you'll get none." In a burning desire for revenge, Burke smuggled a gun aboard a PSA jetliner and used it to send the plane plunging 22,000 feet. Burke's homicide/suicide also killed 41 other people.

Being discharged from a job fills the individual with a sense of failure and impotence. There is rage, despair, and humiliation. Who does one tell first? If it happens suddenly without previous warning, all of these reactions are magnified, and the desire for revenge may erupt. Sometimes the rage becomes uncontrollable and turns into violent assault.

On November 14, 1991, Thomas McIlvane, furious that he had been dismissed from his post office job, walked into a regional postal center and opened fire, killing three workers, wounding six, and then killing himself. A month previously, in Wayne, New Jersey, Joseph M. Harris, a former postal clerk, killed his supervisor, her boyfriend, and

‘Being discharged from a job fills the individual with a sense of failure and impotence. If it happens suddenly . . . these reactions are magnified, and the desire for revenge may erupt.’

two mail handlers. He wrote that he was treated unfairly and that "these people are going to pay." He surrendered quietly. In August, 1986, a part-time letter carrier in Edmond, Oklahoma, killed 14 people in the post office before taking his own life. Why these killings by discharged postal workers? Perhaps employees working for the post office feel they are "set for life." Also, postal employees frequently complain that they are disparaged and receive little respect despite stressful jobs and daily deadlines.

My own clinical prescription for managers: *pay as much attention to firing as you do to hiring.* There should be prior notice with someone else in the room. Reasons for possible discharge should be

spelled out clearly. If the termination is on the basis of poor work performance, it should be discussed as well as how to improve on this job or the next ("constructive firing"). Maybe he or she should try a different kind of work.

If you're hiring someone and you're uncertain about his or her work competence or emotional stability, there's always the extra interview or test or back references as a check. If you're firing someone and there's a severe outburst or threat, extensive counselling and outplacement services are in order. Other managers and employees should be alerted if a desire for revenge is expressed.

There is a wider societal implication as well. In studies of major life stresses which all humans endure, death is the most profound — death of a spouse, a child, or a young parent. Next, a disabling illness or accident. Next, divorce. Next, loss of a job, a house burning down, a prison sentence. Over time, we have evolved customs and traditions for dealing with these major traumas. There are condolence calls after bereavement, sick calls to a hospital, formal or informal support groups for the newly-divorced, and insurance payments for personal injury or fire. No such traditions have yet evolved to help the person who's been fired. We're all a little baffled about what to say and what to do. Should there be a

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"condolence" call or would that be too hurtful and humiliating? Do we visit with a sixpack and invite the person to "get drunk and sleep it off?" Do we suggest a long vacation "to get away?"

A senior comptroller was let go after his company had been merged into a conglomerate. "What is galling," he told me explosively, "is that my work performance was excellent, and the company was thriving. My relationships with everyone there were top drawer. It's so unfair!" Later, he continued, "There's a basic flaw in our society. Friends I've seen daily for years have stopped calling and

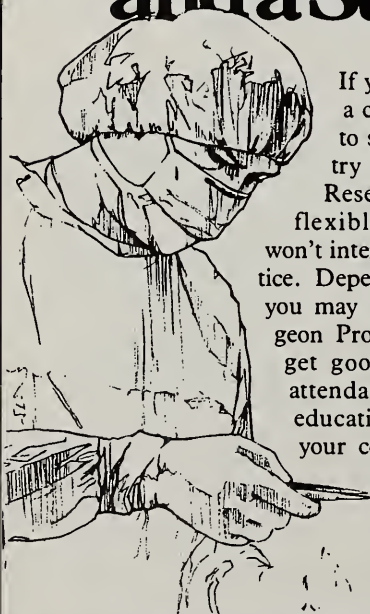
tend to avoid me as if I had a contagious disease. When we do get together, there are silences or forced laughter. Even my kids aren't invited to birthday parties anymore. I'm with a good outplacement service, and they tell me it will take 6 months or more to find something suitable. There's always a friendly ear there when I start feeling panicky. My family doesn't have that luxury."

(That friends avoid him is reminiscent of what happens among couples of longstanding friendship and one couple divorces; this man and woman tend to be bypassed. The subconscious reaction is, "If it

could happen to them, might it happen to us?")

When I asked the comptroller how he would like people to respond, his brow furrowed, and he answered slowly, "I'm not sure. I haven't thought much about it." Then a faint smile crossed his face. "I have an old college roommate who I don't see very often. He heard about my situation and called to give me the name of a man in his company who was looking for a branch manager. It didn't work out, but I'll never ever forget the kindness."

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Brief Summary. Consult the package insert for complete prescribing information.

Indications and Usage: 1. *Active duodenal ulcer*—for up to 8 weeks of treatment at a dosage of 300 mg h.s. or 150 mg b.i.d. Most patients heal within 4 weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a dosage of 150 mg h.s. at bedtime. The consequences of therapy with Axid for longer than 1 year are not known.

3. *Gastroesophageal reflux disease (GERD)*—for up to 12 weeks of treatment of endoscopically diagnosed esophagitis, including erosive and ulcerative esophagitis, and associated heartburn at a dosage of 150 mg b.i.d.

Contraindication: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H₂-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H₂-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chloridazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fetal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method. PV 2093 AMP

Additional information available to the profession on request.

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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

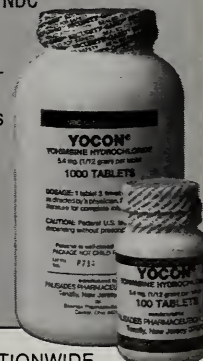
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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On Retirement

Charles R. Underwood, M.D.

“The past and present are only our means; the future is always our end. Thus we never really live, but only hope to live. Always looking forward to being happy, it is inevitable that we should never be so.”

Pensées, III, 1670
BLAISE PASCAL

“Oh, that I had in the wilderness a lodging place of wayfaring men; that I might leave my people and go from them.”

Jeremiah IX, 2, c.625 B.C.

*“O blest retirement! friend to life’s decline —
Retreats from care, that never must be mine,
How blest is he who crowns, in shades like these,
A youth of labor with an age of ease!”*

The Deserted Village, 1770
OLIVER GOLDSMITH

I AM GETTING to that age, we all must do so sooner or later, when they all say to you, begin a conversation with, the query, “And when are *you* going to retire?” I tire of it. The proposition. The mere threat of it gives me pause. No, anxiety, for it is an unknown world which I have with studied diligence refused to admit would someday be a part of my life. And yet, they keep asking.

We had the Garden Club Christmas Party again this year, as we have for several past years. Not my Garden Club but that of my live-in

“The proposition. The mere threat of it gives me pause. No, anxiety, for it is an unknown world which I have with studied diligence refused to admit would someday be a part of my life. And yet, they keep asking. 9

gardener. I looked about the room while sipping the libations of the before-dinner hospitality hour. Suddenly, a wave of astonishment swept over me as I thought, “My God, I am about the only person in this room still working for a living!” Well, one doesn’t mention that sort of thing amidst the quiet comfort of a discussion which turns on dahlias and azaleas. I did try once actually. It was an effort to enter the horticultural conversation with one of the lady gardeners whom I had long suspected of having marginal knowledge of those matters discussed at the monthly gatherings. I eased up to her, sort of casual like, and in my most erudite manner asked, “How did your Hemorocallis do this past summer?” Her face contorted into a mask of shocked disgust with pupils dilated and mouth gaping. I might as well have inquired into the regularity of

her menstrual flow, for it was clear that the Hemorocallis brought to her visions of matters far removed from the common daylily.

But, like it or not, accept the inevitability of it or not, nonetheless awaiting us all, near or far, is the threat of retirement. Of gearing our life to a different pace than that to which we have so long become accustomed. The clichés concerning it are rampant and given freely. They tell you that you have to prepare for, anticipate, retirement. And I think, “as one might anticipate and prepare for a hanging.” I have seen it done well by one who departed his practice at 55 years of age and happily spent his years traveling the world. He had “married well.” Yet another quit at the usual 65-year milestone and grumbled that he should have held on longer. Time lies heavily upon his days.

Soon after the infamous Christmas party came one morning on my hospital rounds a conversation which brought once again to my mind the matter of retirement. I had performed a mastectomy upon Helen, an elderly women, and was discussing her discharge planning when she remarked, “I guess I will have to find another doctor for my aches and pains. George is retiring in January you know.”

I had known George from my earliest days in practice. He carried out a family medical practice in a

small hamlet not far from my place and had referred patients to me on occasion through the years. I had long marveled at his diagnostic acumen. Once I had seen in my office a lady sent to me by "Dr. George" and having been advised by him that she should have a hysterectomy. "And when did you last have a pelvic exam?" I asked. "Oh, I have never had a pelvic exam. He can just tell about such things by talking to me" she replied.

Helen recalled her first contact with George. It happened one night around midnight some 3 months following the birth of her first child many years earlier. Her young husband had awakened her complaining of pain in his neck and jaw. He was pale and sweating. She recognized the seriousness of his complaints and phoned her usual physician, a man known to have a weakness for strong spirits. When prolonged ringing of the telephone failed to raise him, she summoned the police to his home but they too met with failure. It was at that point that she turned in desperation to the new, young and yet unproven physician in town, Dr. George. "You know," said Helen as my morning rounds moved from medical interrogation to a social encounter, "George was never much of a conversationalist. He only used two or three words, 'Yep,' 'Nope,' and a few others. When I called it was near midnight, and I apolo-

gized for calling and being new to him he just said, 'I'll be there.' He was, too, and quickly. Just walked in, looked at my husband for a minute or so and said, 'Your husband has had a heart attack.' That is all he said. He just stood there. And so I said, 'Does he need to go to the hospital?'

'Yep.'
Nothing more, so I asked, 'Can he go in a car?' And he said, 'Nope.'"

Helen went on to call the ambulance, her husband survived, and from that night on George was her doctor. She went on to tell me about his practice. How folks just started to come to see him in the early morning and sat in the little crowded reception room waiting their turn which might take several hours. Somewhere shortly before noon he would look out upon the patiently waiting throng, and say to his only office assistant, nurse and secretary and receptionist, "That is all for today, Mabel, Lock the door."

And so it was as my rounds this particular day stretched far beyond the usual time frame. Helen was in a talking mood and, I had come to know from years spent at the bedside as well as from my marital companion that one must recognize and give time to these rare and precious moments

which give meaning to our lives, allowing less pressing matters to find their place elsewhere. Dr. George was retiring, and Helen was in a mood to tell me about him. Tell me how one family physician carried out his practice and conducted his life in such a way that all in his community came to love and respect and admire him. Came to do so, though he talked but little and sent them next door to use the bathroom in the drugstore. Helen was of a mind to tell me about him. I listened.

They are having a reception, sort of a "thank you party," for Dr. George next month at the county high school gym. The whole town is participating. I plan to go and see him. I want to tell him of my respect for him and hear him say, "Yep." I want to ask him if he thinks he will miss the patients, people like Helen, and hear him say, "Nope." I want to shake his hand, look at and study him, and wonder how it is that you crowd people into a small waiting room, see them when time permits, and send them to the bathroom at the drugstore, and then retire from it all with the whole town throwing a retirement party for you. Like I said at the beginning, we are all going to be there some day. At the time for retirement, I want to be ready for it, and I think George can help me. I think he has the secret.

What's New in Cardiovascular Imaging in 1992?

Randolph E. Patterson, MD, Robert L. Eisner, PhD

THE PURPOSE of this paper is to review the current status of various imaging modalities as tools for clinical diagnosis, assessment and research in cardiovascular diseases.

The most exciting imaging modality for cardiovascular disease is positron emission tomography (PET). This modality will be discussed in detail with briefer mention of single photon emission computed tomographic (SPECT) nuclear imaging, echo/Doppler cardiography, magnetic resonance imaging (MRI), and spectroscopy (MRS) and cine computerized tomography (CT) (Table 1).

SPECT Nuclear Imaging

Single photon emission computed tomographic (SPECT) cameras have replaced planar gamma cameras as the standard of care for myocardial perfusion imaging (MPI). Accuracy is proven to be greater with SPECT, and physicians should request SPECT when their patients are referred for imaging of thallium-201. Objective quantitation of SPECT images has been a major improvement, particularly to detect circumflex coronary athero-

Objective quantitation of SPECT images has been a major improvement, particularly to detect circumflex coronary atherosclerotic heart disease.

sclerotic heart disease (CASHD). Nevertheless, considerable experience is necessary to guide interpretation in order to avoid mistakes.

Most artifacts cause false-positive rather than false-negative results with SPECT Tl-201. It seems clear that the greater accuracy of stress SPECT Tl-201 makes it more cost-effective than exercise ECG. For patients who can exercise, it seems wise to use this mode of stress for the extra information that the exercise responses can provide. For pa-

tients who cannot exercise to 85% predicted maximum heart rate, however, pharmacologic stress with dipyridamol or adenosine can produce the same sensitivity and specificity to detect CAD as do maximal exercise SPECT images. Adenosine seems to produce more unpleasant side effects than does dipyridamol and requires two intravenous catheters. Either drug adds about \$150–250 to the cost of the procedure. Patients with major components of bronchospastic lung disease should not receive either drug, and theophylline or caffeine blocks the effects of both drugs.

Radionuclide Ventriculography

Planar imaging remains useful for ECG-gated blood pool scans (GBPS) for cardiac function. GBPS remains the best way to assess function of both left and right ventricles in systole and diastole. GBPS is not as reliable as two dimensional echocardiography for cardiac function if the patient has atrial fibrillation or other chronic arrhythmias that interfere with gating. Otherwise GBPS is quantitative, less dependent on operator skill and chest

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Table 1. — Comparison of Different Modalities for Cardiovascular Imaging

<i>Modality</i>	<i>Advantages</i>	<i>Limitations</i>
Planar Tl-201	Inexpensive (\$150,000)	Less accurate than SPECT
SPECT Tl-201	Accuracy better than planar Better than exercise ECG	Costs \$300,000 Less accurate than PET
SPECT Tc-99m SESTAMIBI	Better statistics than Tl-201 May be able to measure cardiac function	Defects on stress are milder than with Tl-201 Adds \$120-200/test
Planar GBPS: Rest	Best test of global and regional cardiac function	Very difficult if arrhythmia is present Hard to know absolute chamber size
Planar GBPS: Exercise	Excellent assessment of cardiac function during exercise	Lacks specificity for CAD because many diseases affect cardiac function
First Pass Radionuclide Ventriculography: Rest	Best right ventricular function evaluation Best cardiac shunt evaluation	Need fast camera and good intravenous access
Echo/Doppler	Best test for pericardial disease, cardiac thrombus and valvular heart disease	Hard to get good views of heart in some patients Images depend on skill of operator
Transesophageal Echo/Doppler	Better views of cardiovascular structures than transthoracic — especially for clot and valve function	Small risk and inconvenience of placing transducer in esophagus
Stress Echo	Can see abnormal contraction on stress in many patients with CAD No need for radioactivity to diagnose CAD	Very hard to image during exercise Requires large dose of Dobutamine to be sure test is negative Cannot always see all walls of heart
Cine MRI	Excellent structural detail and spatial resolution (1-2mm) Congenital heart disease	Cost \$2,000,000 No "contrast agent" for myocardial perfusion Need stable rhythm
MR Spectroscopy	See change in high energy phosphate compounds	Experimental method At least \$2,000,000
Cine CT	Outstanding structural detail Absolute blood flow See calcium in coronary arteries	Best with x-ray contrast material that has side effects Costs \$2,000,000
PET	Can measure perfusion absolute blood flow, metabolism, receptors Cyclotron can label any chemical More accurate than SPECT myocardial perfusion imaging Accurate in evaluation of myocardial viability	Costs \$2,500,000 for camera plus \$2,500,000 for cyclotron Structural detail is limited to 5-7mm

wall anatomy, more reliable to visualize regional abnormalities of all walls of the left and right ventricles and to measure global function if regional abnormalities are present. First pass radionuclide evaluation of cardiac function is better than GBPS for right ventricular function or shunt quantitation, but it requires a special high speed camera and excellent venous access (preferably a central venous catheter).

Myocardial Perfusion Imaging

Tl-201 remains the "gold standard" agent for MPI despite interest in new Tc-99m-labelled perfusion agents that have been approved by the FDA for infarct imaging. These agents (Cardiolite or SESTAMIBI, and Cardiotec or teboroxime) are being used for stress-rest imaging to detect ischemia. Teboroxime has a short biologic half-life that complicates its use, but it has a very high extraction fraction from blood to tissue. SESTAMIBI, on the other hand, has a low extraction fraction at the high flows achieved during stress that has been shown in research and clinical studies to reduce ability to detect perfusion abnormalities.

Transesophageal echocardiography carries a small risk and requires special expertise but allows much better visualization of cardiac structures.

Clinical studies have shown that sensitivity and specificity to detect CASHD are not statistically worse than Tl-201, but these studies have included 30-80% of patients with prior myocardial infarctions (MI) which make it easier to detect CASHD by any test. Despite the ap-

parent limitation of SESTAMIBI to detect CASHD in the absence of prior MI, it may be useful to assess cardiac function on ECG-gated images of wall motion on the same study used for perfusion imaging. The practical application of this approach awaits further investigation and validation.

Echo/Doppler Cardiography

Echocardiography should be performed with two dimensional imaging instruments and Doppler when valve lesions are suspected. Assuming adequate operator training and skill, and knowledge of chest wall anatomy, this technique has become the best way to assess pericardial disease and thrombus. Its use in valvular heart disease makes cardiac catheterization unnecessary in most patients until just before surgery.

An interesting experimental application of cine CT has been imaging calcium deposits as indicators of atherosclerotic plaques in the walls of coronary arteries without contrast agents.

Transesophageal echocardiography (TEE) requires insertion of a probe into the esophagus, similar to upper gastrointestinal endoscopy. TEE carries a small risk and requires special expertise but allows much better visualization of cardiac structures, particularly thrombi in the heart, vegetations on valves, function of prosthetic valves and, aortic dissections.

Echocardiography has been performed during stress induced by exercise or dobutamine to produce

ischemia to diagnose CASHD in patients. Early reports indicate reasonable accuracy in the hands of expert echocardiographers. Many patients cannot have adequate studies of all ventricular walls due to chest wall anatomy, especially during exercise. The dose of dobutamine required to rule out CASHD is 40 mg/kg/min, several times the usual clinical dose in ICU patients. This dose increases heart rate, blood pressure, and ventricular ectopy. This technique is not more accurate than SPECT TL-201 even in the best laboratories. Dipyridamol rarely induces ischemia to be detected by echocardiography so that a negative study has no diagnostic value.

Magnetic Resonance Imaging and Spectroscopy

ECG-gated magnetic resonance imaging (MRI) of the cardiovascular system can display remarkable structural detail of cardiac chambers, although the computer software for cardiac studies is not as developed on many systems as it is for other modalities. Some "MRI contrast agents" can enhance definition of structural details such as thrombus, chamber size, and aortic dissection. There is not yet a useful "MRI contrast agent" for perfusion imaging. The major clinical use of cardiovascular MRI may be in congenital heart disease, but it requires heavy sedation of most pediatric patients. Also, the cost of MRI instrumentations is over \$2,000,000.

There has been investigative interest in magnetic resonance spectroscopy (MRS). A recent breakthrough allows reasonable spatial localization of a field in which the ratios of different high energy phosphate compounds can be measured. One recent paper showed that stress-induced myocardial ischemia produced a transient change in high energy phosphate ratios in patients with severe CASHD, but the clinical usefulness

of this experimental technique remains unknown.

Ultrafast Cine Computed Tomography

Ultrafast cine computerized tomographic (CT) scans using x-rays can provide outstanding structural detail, especially when used with x-ray contrast agents. The radiation exposures are almost as great as cardiac catheterization and angiography, and the risks of contrast agents (allergy, renal dysfunction, and volume loading) are the same as with other x-ray procedures. Some experimental studies indicate that absolute myocardial blood flow can be measured in ml/min/g tissue,

PET is not just a "better mouse trap," compared to standard nuclear imaging; rather, it represents a major advance in imaging the heart and cardiovascular system.

and structural detail is outstanding.

Another interesting experimental application of cine CT has been imaging calcium deposits as indicators of atherosclerotic plaques in the walls of coronary arteries without contrast agents. This approach shows a good sensitivity and excellent specificity to detect CASHD in preliminary testing. There is interest in detecting mild, non-obstructive CASHD by cine CT, but it is not clear how often the early, non-obstructive atherosclerotic plaque contains enough calcium deposits to be visualized. Also, the cost of these special ultrafast, cine CT scanners is near \$2,000,000.

Positron Emission Tomography

Although positron emission tomography (PET) has been avail-

Table 2 — Physical Advantages of Positron Emission Tomography (PET)

1. Can *correct for attenuation* by non-cardiac tissues of counts coming from tracers in heart. This overcomes the main problem with planar and tomographic (SPECT) myocardial perfusion imaging. (MPI).
2. Better *spatial resolution* to see two points as separate with PET (5-10mm) than with SPECT (16-20mm).
3. Much better *statistics* (more counts) with PET vs. SPECT.
4. Can do *absolute quantitation* with PET to measure myocardial blood flow (MBF = ml/min/g tissue) or metabolites (moles/min/g tissue) and receptors. Better than relative perfusion.
5. Short physical half life of positron emitting-isotopes *reduces radiation exposure* to patients and staff.

Table 3. — Clinical Advantages of PET Myocardial Perfusion Imaging (MPI)

1. Better sensitivity (95-99%), ie., fewer false negatives to detect CASHD compared to SPECT (80-85%).
2. Better specificity (95-99%), ie., fewer false positives to confirm absences of CASHD compared to SPECT (80-85%).
3. Ability to detect mild-moderate (50-70%) coronary stenosis is much better with PET (70-85%) than with SPECT (45-55%), ie., better assessment of physiological significance of anatomical stenosis.
4. Ability to detect multivessel CASHD as multiple defects much more reliably with PET compared to SPECT.
5. Possibility that Rb-82 leaking out of cardiac cells will detect myocardial viability by PET better than Tl-201 or Tc-99m isonitriles for SPECT.

able in a few research centers for over 20 years, it appears that it has now come of age as a clinical tool in modern cardiology and can offer a virtually unlimited potential as a research tool in the area of cardiovascular diseases.

Advantages

PET imaging of the heart offers major advantages over either planar or tomographic (SPECT) imaging with conventional gamma-emitting isotopes. Table 2 summarizes five physical advantages of PET cameras: 1) attenuation correction; 2) better spatial resolution; 3) better counting statistics; 4) absolute quantitation of radioactivity; and 5) reduced radiation exposure. These advantages derive from the

fact that PET is truly a very different imaging modality from standard gamma imaging using either planar or SPECT cameras. PET is not just a "better mouse trap," compared to standard nuclear imaging; rather, it represents a major advance in imaging the heart and cardiovascular system.

These physical advantages of PET cameras lead to several clinical advantages of PET for myocardial perfusion imaging (MPI) in comparison with either Tl-201 or technetium-99m (Tc-99m) perfusion imaging agents with SPECT: 1) fewer false negatives; 2) fewer false positives; 3) ability to detect mild stenosis more reliably to assess physiologic significance of anatomic lesions; 4) ability to detect

multivessel disease as multiple defects much more reliably; and 5) the possibility that rubidium-82 (Rb-82) leaking out of cardiac cells will help detect myocardial viability (Table 3). Thus, PET myocardial perfusion imaging with Rb-82 obtained from a strontium-82 generator represents a major advance over planar or SPECT imaging of thallium or Tc-99m isonitriles.

If a region of the heart has a perfusion defect on stress that improves on delay, this is good evidence that the myocardium is viable and could be improved by revascularization.

In particular, the ability to correct for attenuation leads to major improvements in accuracy of imaging. The major limitation of planar or SPECT imaging is the fact that radioactive photons coming from the heart would be absorbed by non-cardiac tissues and not be seen by the camera. This attenuation of photons is the major cause of inaccuracies in traditional nuclear imaging. PET corrects for this by recording an image of a ring filled with positron-emitting material around the patient to determine the effect of the patient's body structures on those photons, then using a computer to correct the image obtained for the expected effects of attenuation in that particular patient's body. The inability to perform these corrections with SPECT imaging of Tl-201 or other agents means that the person interpreting the images must take allowances for what appear to be effects of attenuation on the cardiac structures in order to prevent reading too many false positives. The need to make these allowances, how-

Table 4 — Comparison of PET with vs. without Cyclotron

	<i>PET: With Cyclotron</i>	<i>PET: Without Cyclotron</i>
Physical advantages of PET for perfusion imaging	Same with Nitrogen (N)-13-Ammonia from cyclotron	Same with Rubidium (Rb) -82 from Strontium (Sr) -82 generator
F-18 Fluorodeoxyglucose (FDG) for myocardial viability determination	Can produce F-18-FDG by automated chemical synthesis module connected to cyclotron	Must purchase F-18-FDG from nearby cyclotron because of its 2 hour half life
Costs	Cyclotron and radio-chemistry laboratory cost \$2,500,000	Generator costs \$60,000 initially plus \$25,000 per month
Personnel needs	Need 2-4 more highly trained staff	Same nuclear medicine technologists who operate PET camera
Research potential	Unlimited: Clinical and basic research with positron label on carbon (C-11), nitrogen (N-13), or oxygen (O-15) inserted into virtually any biological molecule without distorting its chemical behavior	Limited: Clinical applications of perfusion imaging or FDG (if it can be purchased)
Research projects: (Perhaps future clinical uses)	<ul style="list-style-type: none"> • N-13-ammonia or O-15-water for absolute blood flow • F-18-FDG for myocardial viability • C-11 or N-13-labelled metabolites to trace metabolic thruways • C-11-labelled drugs to study receptors • C-11 or F-18-labelled radiopharmaceutical to label clot, cells, antibodies or atherosclerotic plaque 	<ul style="list-style-type: none"> • Rb-82 perfusion imaging: clinical applications • Rb-82 for myocardial viability or absolute myocardial blood flow

ever, inevitably leads to more difficulty reading true positives. Thus, attenuation correction of PET images decreases both false positives and false negatives to make the test much more accurate to detect disease.

Rb-82 Generator

Many advances of PET in clinical myocardial perfusion imaging are now possible with a PET camera using a strontium-82 generator to produce Rb-82 which has a half life of 70 seconds. This generator can be operated easily by a nuclear medicine technologist to make it

feasible to have stand-alone imaging centers consisting of a PET camera with a generator without the more elaborate cyclotron and radiochemistry laboratories with their highly trained staffs. This type of imaging has proven successful in a number of private hospitals and imaging centers. The PET camera must be able to record very high count rates in order to image the bolus of such a short half-life isotope as Rb-82.

Cyclotron and Radiochemistry Laboratory

On the other hand, PET has been

performed primarily in university settings with large staffs operating both PET cameras and cyclotrons with their radiochemistry laboratories. At present, there have been many advances in cyclotron/radiochemistry lab designs to allow housing of a cyclotron in the radiochemistry lab in a small area. This smaller size of the actual cyclotron and other equipment makes it more feasible to house such a facility. In addition, there are numerous automated chemical synthesis modules that will take positron-emitting isotopes from the cyclotron and quickly perform various chemical steps to produce the desired radiopharmaceutical and perform the quality control needed before injecting into a patient. These automated chemistry modules are available for fluorine F18-deoxyglucose (FDG) and several other chemicals labelled with carbon-11, nitrogen-13, and oxygen-15.

PET can trace virtually any metabolic process and count the number and binding affinity of the receptor sites in heart and arteries for various drugs and hormones.

A small cyclotron for clinical purposes can be run by two people with considerable automation. In PET centers with a cyclotron, N-13 ammonia can be produced from the cyclotron so that there is no need for the expensive Rb-82 generator. A cyclotron can produce FDG which has been used to estimate myocardial viability. This application will be explained in more detail later.

Cyclotron and radiochemistry laboratory equipment cost about \$2.5 million plus the need for 2-4

highly trained staff members to run the operation. Operating supplies, electrical power, and water create some additional monthly expenses. This expense contrasts to the price of a Rb-82 generator which is about \$60,000 initially, plus \$25,000 per month. A Rb-82 generator can be operated by the 2 nuclear medicine technologists needed to operate the PET camera.

Myocardial viability of PET

The assessment of myocardial viability represents a most difficult but important task in modern cardiology. In patients with coronary artery disease who have had a myocardial infarction there is frequently a question of whether a stenotic coronary artery needs revascularization by angioplasty or surgery. The mere presence of a stenosis in a coronary artery does not indicate a need for revascularization, particularly if the heart muscle supplied by the artery is already necrotic and not capable of resuming function after revascularization. The assessment of myocardial viability is very difficult. Not all patients with viable myocardium supplied by a stenotic artery have chest pain, and many patients with myocardial infarction indicated on EKGs have considerable viable tissue in the region indicated by the Q waves.

Coronary angiography does not help measure viability, and contrast angiography, echocardiography, and radionuclide ventriculography can all measure regional cardiac contraction. The problem is that the absence of normal contraction does not prove that the tissue is necrotic. Myocardium can be viable and capable of resuming normal function after revascularization, despite showing serious abnormalities of contraction due to myocardial "stunning" or "hibernation." These two conditions arise from transient ischemia which can have a prolonged effect on cardiac contraction in the injured region of

the left ventricle.

For many years, Tl-201 scanning during stress and rest conditions has been thought to represent the "gold standard" diagnostic tool to detect viable myocardium. If a region of the heart has a perfusion defect on stress that improves on delay, this is good evidence that the myocardium is viable and could be improved by revascularization. On the other hand, the absence of improvement of the perfusion defect on a delay or rest reinjection of thallium does not prove that the tissue would not be improved by revascularization, i.e. that it is viable.

It appears realistic that many of the advances of molecular and cellular biology can be extended from test tubes and cell cultures to living patients through the use of PET imaging of radiopharmaceuticals produced in a cyclotron. PET offers a potential new type of information about patients that has never before been available.

Numerous clinical studies have now shown that 30-50% of the apparently fixed Tl-201 defects actually contain considerable viable myocardium whose function can be improved by revascularization. Even delay imaging up to 24 hours after the initial injection or reinjection of thallium at rest do not detect many patients with viable myocardium.

On the other hand, PET studies

from several laboratories now indicate that myocardial viability can be detected in 78-85% of patients with a "hot spot" indicating greater than normal uptake of FDG is viable tissue that is switched to anaerobic metabolism because of recent ischemic injury. Such activity is regularly found in myocardial regions that show Q waves on the EKG, akinetic contraction, and fixed Tl-201 defects. For these reasons, many large national organizations have concluded that FDG with PET imaging represents the only adequate diagnostic tool to detect myocardial viability.

Clinical implications of an accurate test for myocardial viability are considerable. Many patients currently seen with abnormal regional contraction and fixed Tl-201 defects might be continued on medical therapy whereas they could have benefitted considerably from revascularization. On the other hand, since cardiologists know of this problem, they tend to give the patient the "benefit of the doubt." This means that many patients are referred for invasive revascularization procedures in order to restore blood flow with the hope that the myocardial region was viable and can be improved by receiving more blood flow. It is obvious that many patients will undergo unnecessary risk and cost of the invasive revascularization procedures in order to help a subgroup of those patients who do have viable myocardium.

Using present diagnostic techniques without PET would actually justify frequently performing invasive revascularization procedures on patients where there is a question of viability. Thus, PET with FDG will help select patients much more appropriately for invasive revascularization procedures. This could lead to reduced death rates from these procedures and to reduced cost based on avoiding these procedures in patients who would not benefit. Several cardiac transplant programs, for example, have used

FGD to determine whether a patient might benefit from revascularization instead of the much more expensive and difficult procedure of cardiac transplantation. In this way, it seems likely that PET with FDG will help reduce overall costs of cardiovascular care in the United States.

PET Research

The research potential for PET without a cyclotron is limited to clinical applications of myocardial perfusion imaging. For example, there is considerable interest in determining whether Rb-82 is taken up initially by necrotic myocardial cells but then quickly leaks out because the damaged membrane fails to keep Rb-82 inside the cell. If this can be imaged by a camera, *in vivo*, then it might provide an alternative way to diagnose viable myocardium. This alternative approach remains to be tested at this time.

On the other hand, the research potential for PET with a cyclotron is virtually unlimited. One can perform clinical and basic research studies with the positron label on carbon, nitrogen, or oxygen which have been called the "building blocks of life." These positron emitting isotopes can be inserted into virtually any biologic molecule without distorting its chemical behavior in the body. Thus, metabolic pathways, drug receptors, cellular labels, antibody labels, and perhaps labels for atherosclerotic plaque, *per se*, can be designed.

Further, PET with N-13 ammonia, oxygen-15 water, or possibly, Rb-82 can be used to measure absolute myocardial blood flow in ml/min/g tissue. This measurement provides several advantages over relative perfusion differences as demonstrated on SPECT imaging or even the current use of PET perfusion imaging.

PET can trace virtually any metabolic process and count the number and binding affinity of the receptor sites in heart and arteries for various drugs and hormones. For example, one can measure beta adrenergic receptors in various clinical conditions as possible predictors of sudden cardiac death or of the response to beta blockers in patients with heart failure. It appears realistic that many of the advances of molecular and cellular biology can be extended from test tubes and cell cultures to living patients through the use of PET imaging of radiopharmaceuticals produced in a cyclotron. It is very important to note that in this way PET offers a potential new type of information about patients that has never before been available. Thus, it is obvious that PET is not just a "substitute for coronary angiography" or a "slightly better Tl-201 scan." Rather, PET with cyclotron products offers an exciting new potential for greatly enhanced diagnostic information never previously available about patients.

In particular, PET imaging of several radiopharmaceuticals may lead to greatly enhanced ability to

prevent complications of disease. This is true in several ways. First, simply imaging mild narrowing of the coronary arteries by PET has been shown in some preliminary studies to provide a powerful incentive for changing lifestyle with eventual reversal of the coronary disease. Such a process could be even more effective to detect earlier disease if it is possible to label atherosclerotic plaque, *per se*, with PET radiopharmaceuticals. One could perform scans in apparently healthy young persons to detect the earliest stages of atherosclerosis that require and respond to lifestyle changes. In addition, the ability to image thrombus may well help prevent complications of atherosclerosis in many people. Finally, the ability to image receptors such as beta receptors may help prevent sudden cardiac death by allowing more appropriate selection of patients for various therapies. By greatly increased quality of diagnostic information and eventual improved quality of care, it will be possible to improve the cost effectiveness of health care delivery.

References

1. Cardiac Imaging: A companion to Braunwald's Heart Disease. ML Marcus, HR Schelbert, DJ Skorton, GL Wold, WB Saunders (eds). Philadelphia, 1991.
2. Cardiovascular Imaging. GM Pohost, RA O'Rourke (eds). Little, Brown and Company, Boston, 1991.
3. Noninvasive Testing in the Diagnosis and Management of Suspected or Overt Heart Disease. Crawford MG (ed). Circulation 84 (Supplement I): I-1 to I-332, 1991.
4. Strauss HW (ed). Clinical PET: Its time has come. *Nuclear Med* 1991;32:561-684.



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Advances in Cardiovascular Therapy

Jan L. Houghton, MD

Recent advances in cardiovascular therapy continue to be spectacular. There are now data from large clinical trials regarding optimal use of thrombolytic drugs during acute myocardial infarction and the importance of the open artery hypothesis. Recent approval from the Federal Drug Administration (FDA) of two new devices for use by the interventional cardiologist, directional coronary atherectomy and excimer laser angioplasty, will further expand the role of the cardiac catheterization laboratory in coronary artery revascularization. Better understanding of ventricular remodeling after acute myocardial infarction and the effect of angiotensin converting enzyme inhibitors on this process is an important new development in the treatment of patients after myocardial infarction. Although there are many other advances, these three selected topics will have a major impact on daily clinical care of the cardiology patient in the coming years.

Thrombolytic Therapy and the Open Artery Hypothesis

Intravenous thrombolytic ther-

Better understanding of ventricular remodeling after acute myocardial infarction and the effect of angiotensin converting enzyme inhibitors on this process is an important new development in the treatment of patients after myocardial infarction.

apy is accepted definitive therapy for acute myocardial infarction in patients without contraindications.¹ Currently, there are three agents in widespread use: streptokinase (SK), recombinant tissue plasminogen activator (rt-PA), and anisoylated plasminogen streptokinase activator complex (APSAC).

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Currently, there are two forms of rt-PA: alteplase, a single-chained molecule manufactured by Genentech, which has been used in most studies in the United States, and duteplase, a double-chained molecule manufactured by Burroughs Wellcome, which is not available in the United States. The available data for duteplase suggest that it has significantly less clot lysis ability per milligram than alteplase and that it is not necessarily associated with the same clinical effects as alteplase, the form used in the United States.²

In the third International Study of Infarct Survival (ISIS-3), in which over 46,000 patients with suspected acute myocardial infarction were studied, there was no significant difference in 35-day mortality between duteplase rt-PA (10.2%), streptokinase (10.5%), or APSAC (10.6%).

In ISIS-3, all patients received aspirin 162 mg/day for 30 days. They were also randomized to receive either heparin, administered 12,500 u twice daily beginning 4 hours after the initiation of thrombolytic therapy or placebo. The 46,092 patients were enrolled at almost 1,000 hos-

pitals in 20 countries. Inclusion criteria included suggestive chest pain within 24 hours; approximately 25% presented more than 6 hours after the onset of pain. Approximately 25% did not have ST-segment elevation; one-sixth were age 75 and above. There was no significant difference in mortality in those who received subcutaneous heparin (10.0%) and those who did not (10.5%). However, an actual difference may have been marked by the fact that 15-20% of the patients assigned to heparin did not receive it and that 17% of patients assigned to not receive heparin actually did receive it.

It is uncertain why the age-adjusted mortality in ISIS-3 was greater than in TIMI-2, which used the alteplase form of rt-PA in combination with immediate intravenous heparin. The mortality in ISIS-3 for patients below 75 years of age was 7.8% at 5 weeks, whereas in TIMI-2, patients aged 75 or younger had a 37% lower mortality of 5.0% at 42 days. For patients below 65 years of age, the results are similar, with a 5% mortality in ISIS-3 compared to 34% lower mortality of 3.3% in TIMI-2.

In ISIS-3, streptokinase was associated with a lower rate of intracranial bleeding (0.3%) than APSAC (0.6%) or alteplase rt-PA (9.7%). It should be noted, however, that approximately one-third of these patients did not have a CT scan or an autopsy and that the details of the CT scanning in the other patients is not available. Previous studies had shown a similar rate of intracranial bleeding for streptokinase and APSAC, while the rate of intracranial bleeding with 100 mg of alteplase t-PA was 0.4% in over 10,000 patients in GISSI-2, 0.5% in more than 3,000 patients in TIMI-2, and 0.4% in a number of other reported trials. Overall, however, the composite rate of an adverse outcome in ISIS-3 was not significantly different between the three agents: 10.7% for alteplase, 10.8%

for streptokinase and 11% for APSAC.²

It should be noted that the anticoagulation regimen employed in ISIS-3, subcutaneous heparin every 12 hours, would not be expected to provide adequate protection against reocclusion for at least 24 hours.

Patients presenting within 6 hours with evidence of acute myocardial infarction without contraindication should be treated with a thrombolytic agent.

The on-going Global Utilization of Streptokinase and t-PA for Occluded Coronary Arteries (GUSTO) study should provide important answers to questions raised by the ISIS-3 study. In GUSTO, 40,000 patients in 14 countries who present within 6 hours of the onset of pain and who have ST segment elevation will all receive aspirin (160 mg) and will then be randomized to one of four arms: streptokinase plus intravenous heparin; a front-loaded, weight-adjusted regimen of alteplase form of rt-PA plus intravenous heparin; or a regimen combining streptokinase and alteplase plus intravenous heparin. In the fourth arm, patients will receive streptokinase and subcutaneous heparin, without monitoring the APTT.

In the meantime, the most important principle is to initiate therapy as soon as possible with one of the three agents, each of which appears to have advantages and disadvantages.³ The goal should be to initiate thrombolytic therapy within 1 hour of the onset of pain.

SK, the original drug used for intracoronary, then intravenous

thrombolysis, is still an effective drug for use during acute myocardial infarction. However, it is not fibrin specific and results in breakdown of circulating fibrinogen. Though the half-life of SK is 30 minutes, fibrinogen levels remain depressed for up to 24 hours. This may in fact, be related to the lower rate of reocclusion seen with SK. Because of its bacterial source, allergic reactions and, rarely, anaphylaxis may occur. Due to its immunogenic properties it may not be used a second time until at least 1 year has elapsed. It is felt that SK opens arteries more slowly and thus should be used preferentially early rather than late in the course of an infarct. SK is simple to administer and low in cost. Acute patency rates are 40-60% though late patency rates are similar to those for the other thrombolytic drugs. Concomitant use of aspirin increases efficacy. Hypotension may occur during infusion of SK in up to 15% of patients.

Rt-PA are human proteins manufactured in different forms by recombinant DNA technology. Overall, they have an excellent record as thrombolytic agents in coronary arteries. They generally cause rapid clot lysis and should be used preferentially when patients are seen late. Because they are fibrin specific, less systemic fibrinogen degradation is produced. Because of this property together with its short half-life (5 minutes), reocclusion is a known risk. This risk is mitigated by concomitant use of intravenous heparin. Early patency rates are high, in the range of 60-80%. They rarely cause allergic reactions and do not induce hypotension. It is slightly more complicated to administer and relatively expensive. As noted above, there are currently two types of rt-PA: alteplase and alteplase.

APSAC is a SK-like drug which consists of an active plasminogen-SK complex temporarily protected by acetylation. This results in a long

half-life (90 minutes) and, accordingly, prolonged fibrinolytic activity. As soon as it is reconstituted with sterile water, deacylation begins yielding active drug. It is important that reconstitution occur within 10 minutes of infusion. Otherwise significant deacylation may occur, and rapid infusion could then lead to hypotension. APSAC is generally administered as a 5-minute bolus, making it the easiest agent to use. Early patency rates are high (60-80%) and rate of reocclusion low. Cost is slightly lower than rt-PA. Allergic reactions and hypotension may occur.

The open artery concept refers to the fact that if a coronary artery is opened after thrombosis during acute myocardial infarction, prognosis is improved.⁴ Many clinical trials have demonstrated this, beginning with the Western Washington trial in 1985,⁵ which showed a 1-year survival rate of 98% in intracoronary SK recipients who demonstrated angiographic reperfusion. This was in comparison to a 1-year survival of 85% in those not achieving angiographic reperfusion and in controls. This survival benefit appears to be independent of the thrombolytic agent used. The first Thrombolysis in Myocardial Infarction (TIMI-1) study showed decreased in-hospital mortality (4.3%) in those patients with angiographic patency after either intravenous SK or alteplase rt-PA, compared with those with persistent occlusion (9.4%).⁶ This survival benefit was sustained at 6-month followup. The ISIS-3 study, which enrolled over 46,000 patients, found no significant difference in mortality at 35 days among the three thrombolytic agents used: SK, duteplase rt-PA, and APSAC.²

The benefit appears to be greatest when the artery is opened early after occlusion, but there is mounting evidence that there are advantages even when the artery is opened late. The second Interna-

tional Study of Infarct Survival (ISIS-2) compared intravenous SK therapy or aspirin or both with placebo.⁷ Patients were enrolled for up to 24 hours after onset of symptoms. There was a small but statistically significant mortality benefit with treatment from 5 to 24 hours. This time period has classically been considered beyond that associated with myocardial salvage secondary to reperfusion.

The open artery time-dependent hypothesis is not yet proven, though there is widespread anecdotal and accumulating scientific support for the concept that late patency is better than no patency.

There are currently two separate open artery hypotheses: the first and older is a time-dependent hypothesis and the second is time-independent.⁸ The term "time" is used here to connote urgency. The time-dependent open artery hypothesis states that opening the vessel early results in maximum benefit because myocytes are salvaged. This results in smaller infarct size, improved left ventricular function, and decreased hospital and 1-year mortality. In human beings, occlusion of a coronary artery usually results in complete necrosis of myocytes in that perfusion distribution within 6 hours. Therefore, in the time-dependent open artery hypothesis, the earlier thrombolytic therapy is given, the better; but the conventional 6-hour window is used as the endpoint for initiation of this therapy. This window, in reality, has some latitude, depending on patient presentation. There are

patients who present with a stuttering course suggesting recurrent bouts of thrombosis and thrombolysis over a period of days prior to seeking medical attention. Other patients present with a seemingly prolonged course but with minimal objective evidence of myocardial necrosis by serial electrocardiographic and CPK isoenzyme studies. These patients may have a totally occluded coronary artery but excellent collateral blood supply. Some of these patients might benefit from thrombolytic therapy even when the onset of symptoms is greater than 6 hours old.

The time-independent hypothesis states that though early opening of an infarct-related artery confers the greatest benefit to the patient, late patency is better than no patency. There are a number of proposed mechanisms used to explain the possible benefits of late patency even in the absence of detectable myocyte salvage. One mechanism states that there may be islands of tissue within the region of infarction that retain the potential for viability for many hours. Another mechanism recognizes the fact that healing of the infarct and subsequent scar formation requires substrate supply to fibroblasts which elaborate collagen. Better blood supply to the infarct zone during the reparative stage might lead to better, tighter scar formation. This, in turn, might improve remodeling of the ventricle post infarction so that there is less aneurysm formation and less dilation of the ventricle. Another proposed advantage of the open artery is that it may provide scaffolding or structure for the myocardial parenchyma so that aneurysm formation may be less likely. Yet another proposed mechanism is improved electrical stability beyond that expected from improved ventricular remodeling. Finally, it is theorized that because of the progressive nature of coronary atherosclerosis, an opened artery may be of benefit in

the future as a source of collaterals for a subsequent infarct in a different coronary distribution.

Trials are currently in progress to test the time-independent hypothesis. Preliminary data from one such trial based in South America and called the EMERAS trial were recently reported.⁹ Of 3500 patients presenting late, defined as 6 to 24 hours after the onset of symptoms of a myocardial infarction, randomization was carried out between intravenous SK and placebo. Approximately one half of patients presented between 6 and 12 and one half between 12 and 24 hours. Those receiving SK between 6 and 12 hours had a lower mortality rate than placebo, though the differences were not significant. No benefit was found in the group treated from 12 to 24 hours. However, when data from GISSI-1 and ISIS-2 are included, 21,000 controls and 21,000 treated patients may be analyzed. This analysis begins to show a significant survival advantage of late treatment but also an increased complication rate secondary to intracranial bleeding, hypotension, and anaphylactic shock.

We are already seeing statewide use of the directional atherectomy device and will soon be seeing the excimer laser in clinical use at selected tertiary care centers.

There may be some flaws in this study, however. First, SK is not an optimal agent for late administration as it is a less effective agent in lysing older thrombi. Secondly, heparin was not used in this study. Finally, the endpoint for benefit for late administration may be difficult to test and may require long-term

followup. Only short-term followup is currently available from this study.

Other trials designed to provide further information regarding efficacy of late treatment include the LATE trial (Late Assessment of Thrombolytic Efficacy),¹⁰ late presenting patients from ISIS-3, and a late phase (after 6 hours) thrombolytic therapy and angioplasty trial from the Thrombolysis and Angioplasty in Myocardial Infarction (TAMI) investigators. In TAMI-6, 197 late patients, arriving 6 to 24 hours after onset of symptoms, were randomized to placebo or rt-PA.¹¹ Patients then underwent coronary angiography whereupon those with closed vessels were randomized to angioplasty or no angioplasty. In both the rt-PA and angioplasty groups, there was a high patency rate, but this did not lead to significant differences in clinical outcome or mortality in-hospital and at 6-month followup possibly because of relatively small numbers.

The open artery time-dependent hypothesis is now accepted medical theory. Patients presenting within 6 hours with evidence of acute myocardial infarction without contraindication should be treated with a thrombolytic drug. The open artery time-independent hypothesis is not yet proven, though there is widespread anecdotal and accumulating scientific support for the concept that late patency is better than no patency. Based on pooled data from several trials, there is more support for opening occluded vessels from 6 to 12 hours after onset than 12 to 24 hours. Patients with evidence of a stuttering infarct should be viewed more leniently with respect to the duration of myocardial viability so that the thrombolytic window is extended beyond 6 hours. Finally, methods for testing late patency and beneficial effects on left ventricular remodeling post-infarction are still evolving. Anecdotal clini-

cal experience suggests, however, that late patency leads to less ventricular dilatation and aneurysm formation.

New Interventional Devices

Since approval by the FDA in 1980, balloon angioplasty has evolved tremendously. Current balloon types include the conventional balloon over a wire, the lower profile but less steerable balloon on a wire, and the user friendly monorail balloon catheter, whereby the balloon runs over the wire for a short distance, then beside it. The advantages of the balloon angioplasty system include extensive operator experience, simplified procedural elements and equipment, and flexible low profile catheters which permit placement nearly anywhere in the coronary tree. Advances in balloon material have occurred that permit less straightening of the vessel when inflated on a bend. This results in a decrease in shearing stress along the inner curvature, lessening the risk of dissection.

Balloon angioplasty, though a tremendous tool for nonsurgical revascularization of the coronary arteries, continues to be an imperfect technology. Dissection, acute closure, elastic recoil of dilated segments, and restenosis continue to be significant problems. Inability to dilate heavily calcified segments and ostial lesions and poorer results in long lesions (> 5 mm) and chronic occlusions are additional shortcomings. Finally, bulky and eccentric atheromata are often inadequately treated with balloon angioplasty.

Because of these limitations, it is with pleasure that the new modalities become available for use by interventional cardiologists who are highly trained in balloon angioplasty.

FDA approval of the Simpson directional atherectomy device in September of 1990 and the Decem-

ber, 1991, approval of excimer laser angioplasty has expanded the options for non-operative treatment of symptomatic coronary artery stenosis. Although balloon angioplasty will still be the most commonly used technique, we are already seeing statewide use of the directional atherectomy device and will soon be seeing the excimer laser in clinical use at selected tertiary care centers.

The first newly approved technology in interventional cardiology in a decade is directional coronary atherectomy.¹² This was first tested in larger peripheral arteries, then miniaturized and adapted for use in the coronary arteries. The Simpson Coronary Atherocath, named after its inventor, consists of a biopsy housing with side window cutter opposed by an eccentrically placed balloon, a distal nosecone for collection of excised tissue, and an over the wire supporting catheter design. This apparatus requires a 10 or 11 French guiding catheter for placement in the left coronary artery and a 9.5 French guiding catheter in the right coronary artery.

These catheters are not only larger but stiffer than conventional angioplasty catheters in order to facilitate delivery of the rigid cutter housing. These catheter properties preclude use in some patients with peripheral vascular disease or small arteries. Because the catheter is relatively rigid in its distal segment, placement of the device is generally limited to ostial, proximal, or mid-left anterior descending or right coronary arteries, saphenous vein grafts, and circumflex arteries without angulated take-offs from the left main artery. Since the device is designed to cut and remove plaque from the patient, it is an excellent choice for treatment of eccentric lesions, for large plaque burden where debulking can't be achieved via a balloon, and for lesions which have demonstrated significant elastic recoil or fibrous re-

stenosis after balloon dilatation. This procedure works best in large coronary arteries, but it may be performed in vessels as small as 2.5 mm in diameter. The incidence of dissection and acute closure are lower in atherectomy compared with balloon angioplasty.

Restenosis rates appear to be lower in proximal de novo lesions in large native vessels, on the order of 18%.¹² There are data to suggest a lower restenosis rate also for proximal or ostial saphenous vein graft lesions.

“Laser” is an acronym which stands for “light amplification by stimulated emission of radiation.” Laser light may be focused by lenses and transmitted through optical fibers to be absorbed selectively by certain tissues depending on the wavelength. “Excimer” is a term which stands for “excited dimer.” The most commonly used excited dimer is xenon chloride. This gas is unstable and leads to photon emission with a wavelength equal to 308 nm which is in the ultra-violet spectrum. Excimer laser energy is absorbed by proteins or peptides resulting in photomolecular dissociation. Thus, the excimer laser beam encribes an impact crater with the ability to vaporize soft, fibrous, and calcified plaque but with no thermal effect on the adjoining tissue. The excimer laser operates only in a pulsed mode, further decreasing the possibility of heat generation.

This xenon chloride excimer laser has an absorption depth of 0.05 mm. This is well within the critical dimension of the coronary artery, based on the coronary wall thickness, which is assumed to be approximately 0.5 mm. Current laser catheter sizes (diameter of cross sectional area) range between 1.3 to 2.0 mm. Larger sizes are being developed. Tissue ablation can be expected in a cross-sectional area approximately equal to the laser catheter area. Energy delivered to

the plaque via the laser catheter is expressed as fluence in mj/mm^2 . This energy is pulsed at a selected repetition rate for 5 seconds. There is a 15-second waiting period between each 5-second laser pulse. The required fluence and repetition rate depend on the character of the atherosclerotic plaque, i.e., whether it is soft, fibrous, or calcified.

It is expected that excimer laser angioplasty will allow the extension of revascularization in the cardiac catheterization laboratory to lesions that are not usually amenable to balloon angioplasty or atherectomy or have high restenosis rates with these.¹³ These include ostial lesions, total occlusions, bypass grafts, long diffuse lesions, calcified lesions, and certain eccentric lesions. This technique is not considered stand-alone in many cases because of the relatively small resultant cross sectional areas obtained. Thus, it is expected that this technique will require adjunct balloon angioplasty or atherectomy in many cases.

Ventricular Remodeling After Myocardial Infarction

In the hours after myocardial infarction, nonviable myocytes undergo necrosis leading to infarct expansion as the residual tissue thins and elongates. When the infarct is large, this process may result in aneurysm formation and left ventricular dilatation. If left ventricular emptying is impaired significantly, preload increases; this may lead to dilation of both abnormal and normal myocardial segments and compensatory hypertrophy of normal segments. Healing of an infarction occurs via fibroblast proliferation and deposition of collagen over a period of weeks to months. This process may depend in part on the degree of residual blood supply to the tissue whether it be via late restoration of patency in the infarct related artery or via collaterals.

Those at greatest risk for dilation

and aneurysm formation are patients with large infarctions, evidence of early infarct expansion, and a persistently occluded infarct-related artery.¹⁴ Clearly, infarct expansion, which leads to adverse ventricular remodeling after myocardial infarction, can be affected acutely by efforts to restore patency of the coronary artery and reduce myocardial oxygen demand. Clinical efforts to reduce myocardial oxygen demand are well known and based on sound theory. Because the three major determinants of oxygen demand in the heart are heart rate, wall stress (direct dependence on blood pressure and intraventricular size), and contractility it is not surprising that intravenous nitroglycerin, which decreases blood pressure and intraventricular volume, and a beta blocker, which decreases heart rate and contractility, are the cornerstones of adjunctive therapy during acute myocardial infarction.

Post infarction, afterload reduction via angiotensin converting enzyme (ACE) inhibitors has been proposed for prevention or mitigation of infarct expansion and left ventricular dilation.¹⁵ It is proposed that this would not only lower wall stress but also reduce the trophic or growth stimulus effects of angiotension II which might lead to compensatory hypertrophy of the non-infarcted segments. In a double-blind, randomized trial of 100 patients receiving either placebo or captopril 50 mg twice a day, captopril therapy initiated within 24-48 hours of onset of Q-wave infarction prevented significant increases in end-diastolic and end-systolic volumes which were uniformly present in the placebo group at 3 months.¹⁶ Though some benefit has been found when ACE inhibitors are begun at 1 week¹⁶ and even 1 year post myocardial infarction.¹⁸ It is appealing to begin this therapy at the onset so that early infarct expansion may be minimized and progressive dilatation prevented.¹⁹

The Survival and Ventricular Enlargement (SAVE) trial is designed to evaluate the effect of ACE inhibition on post infarction death and ventricular dilation.²⁰ This trial recruited post-infarction patients with ejection fractions $\leq 40\%$ for randomization within 3 to 16 days into placebo or captopril arms. This trial will provide long-term followup (minimum of 2 years, average of 3.5 years) of the effects of relatively early captopril administration on the endpoints, mortality and left ventricular ejection fraction. Results are expected in 1992 from this trial, which first randomized patients in 1987. Other studies are currently in progress to assess the effects of prompt administration of ACE inhibition together with thrombolytic therapy²¹ and ACE inhibition in those patients who are not candidates for thrombolysis.²²

In summary, advances in cardiovascular therapy of symptomatic coronary artery stenosis, acute myocardial infarction, and optimal post infarction management continue at a rapid pace. In the next several years, practitioners can expect to see more emphasis on thrombolysis during acute myocardial infarction in those presenting late, or between 6 to 24 hours. Furthermore, ACE inhibitors may become standard therapy post infarction, just as aspirin and beta blockers are currently. Lastly, atherectomy and laser angioplasty will expand the role of the cardiac catheterization laboratory in the non-surgical coronary artery revascularization of selected patients.

References

1. Grines CL, De Maria AN. Optimal utilization of thrombolytic therapy for acute myocardial infarction: Concepts and controversies. *J Am Coll Cardiol* 1990;16:223-231.
2. Scheidt S, Rogers W, Tiefenbrunn A, Bleich SD, Collen D. ISIS-3: Implications for American Practice: Medical Panel Discussion. *Cardiovasc Rev and Rep* 1991;37-60.
3. Topol EJ. Which thrombolytic agent should one choose? *Prog Cardiovasc Dis* 1991;34:165-178.
4. Tiefenbrunn AJ, Sobel BE. Invited review: Thrombolysis and myocardial infarction. *Fibrinoly-*

sis 1991;5:1-15.

5. Kennedy JW, Ritchie JL, Davis KB, et al. The Western Washington randomized trial of intracoronary streptokinase in acute myocardial infarction. *N Engl J Med* 1985;312:1073-1078.

6. Dalen JE, Gore JM, Braunwald E, et al. Six and twelve-month follow-up of the phase 1 Thrombolysis in Myocardial Infarction (TIMI) trial. *Am J Cardiol* 1988;62:179-185.

7. ISIS-2 (second International Study of Infarct Survival) Collaborative Group. Randomized trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2. *Lancet* 1988;2:349-360.

8. Fortin DF, Califf RM. Long-term survival from acute myocardial infarction: Salutory effect of an open coronary vessel. *Am J Med* 1990;88:1-15N.

9. Rogers WJ. Recent clinical trials of thrombolytic therapy in myocardial infarction: An update. *Hosp Formulary* 1991;26:6-14.

10. Tiefenbrunn A. Infarct-artery patency: Two hypotheses. *Hospital Formulary* 1991;26(Suppl C):15-21.

11. Topol E for the TAMI Investigators. Preliminary results from the TAMI-6 trial. Presented at the American Heart Association 63rd Scientific Sessions, Nov 1990.

12. Hinojara T, Robertson GC, Selmon MR, Simpson JB. Directional Coronary atherectomy. *J Invas Cardiol* 1990;2:217-226.

13. Sanborn TA, Torre SR, Sharma SK, Hershman RA, Cohen M, Sherman W, Ambrose JA. Percutaneous Coronary excimer laser-assisted balloon angioplasty: Initial clinical and quantitative angiographic results in 50 patients. *J Am Coll Cardiol* 1991;17:94-99.

14. Braunwald E, Pfeffer MA. Ventricular enlargement and remodeling following acute myocardial infarction: Mechanisms and management. *Am J Cardiol* 1991;68(Suppl D):1D-6D.

15. Pfeffer MA, Lamas GA, Vaughan DE, Parisi AF, Braunwald E. Effect of captopril on ventricular dilatation after anterior myocardial infarction: *N Engl J Med* 1988;319:80-86.

16. Sharpe N. Early preventive treatment of left ventricular dysfunction following myocardial infarction: Optimal timing and patient selection. *Am J Cardiol* 1991;68(Suppl D):64-69D.

17. Sharpe N, Murphy J, Smith H, Hannan S. Treatment of patients with symptomless left ventricular dysfunction after myocardial infarction. *Lancet* 1988;255-2.

18. Sharpe DN. Angiotensin converting enzyme inhibitors in heart failure: A role after myocardial infarction. *J Cardiovasc Pharm* 1991;18:S99-S104.

19. van Gilst WH, and Kingma JH. CATS Investigators Group. Early intervention with angiotensin-converting enzyme inhibitors during thrombolytic therapy in acute myocardial infarction: rationale and design of captopril and thrombolysis study. *Am J Cardiol* 1991;68(Suppl D):111D-115D.

20. Moya LA, Pfeffer MA, Braunwald E. SAVE investigators. Rationale, design, and baseline characteristics of the survival and ventricular enlargement trial. *Am J Cardiol* 1991;68(Suppl D):70D-79D.

21. Nabel EG, Topol EJ, Galeana A, Ellis SG, Bates ER, Werns SW, Walton JA, Muller DW, Schwaiger M, Pitt B. A randomized placebo-controlled trial of combined early intravenous captopril and recombinant tissue-type plasminogen activator therapy in acute myocardial infarction. *Am J Cardiol* 1991;2:467-473.

22. Ambrosioni E, Broghe C, Magnani B. SMILE pilot study working party. Early treatment of acute myocardial infarction with angiotensin-converting enzyme inhibition: safety considerations. *Am J Cardiol* 1991;68(Suppl D):101D-110D.

Tropical Pyomyositis

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STAPHYLOCOCCUS AUREUS has a well known ability to produce abscesses in a variety of organs after bacteremia. Muscle abscesses, or pyomyositis, is rare, as muscle seems to be inherently resistant to *S. aureus*.¹ Pyomyositis occurs most frequently in the tropics and has a characteristic presentation that usually permits an early diagnosis.² In the United States the disease is so uncommon that it is often misdiagnosed. The following case illustrates the diagnostic and therapeutic features of tropical pyomyositis to familiarize physicians with this unusual disease entity.

Case Report

P.R. was a 67-year-old diabetic woman who had recently undergone cataract surgery. Her hospital course was complicated by a superficial phlebitis that involved the left hip. After discharge, she continued to have pressure and blurred vision in her right eye. She was subsequently readmitted and underwent a temporal artery biopsy. She had a prolonged postoperative fever with generalized body aches and malaise. Blood cultures demonstrated a staphylococcal bacteremia. The

This case illustrates the diagnostic and therapeutic features of tropical pyomyositis to familiarize physicians with this unusual disease entity.

patient was transferred to Memorial Medical Center.

Physical examination revealed an elderly female in moderate distress complaining of pain and soreness in both legs. Her temperature was 101°F. Her throat was free from infection; the tympanic membranes were intact. The chest was clear on auscultation. No cardiac murmurs were noted, and the abdominal exam was benign. Her extremities were normal in color with bounding pulses. The left thigh appeared moderately swollen with a

hard mass over the anterior aspect that was locally hyperthermic but non-fluctuant.

The patient's white count was 14,000, and her hematocrit was 35%. Erythrocyte sedimentation rate was 39. The creatinine phosphokinase was not elevated. Computerized tomography of both legs demonstrated multiple fluid collections enhanced by dye at several levels (Figure 1).

Needle aspiration was performed and was positive for *S. aureus*. Intravenous oxacillin was instituted, with improvement of all fluid collections save the one over the left thigh which was incised and drained (Figure 2). CT scan of the abdomen revealed no abscesses, and the other fluid collections eventually dissolved. The patient was discharged on the 12th hospital day.

Discussion

Tropical pyomyositis remains a virtually unknown entity in the continental United States, despite its being responsible for 1-2% of surgical admissions in some tropical areas.³ Characteristically the onset is subacute and often misdiagnosed.

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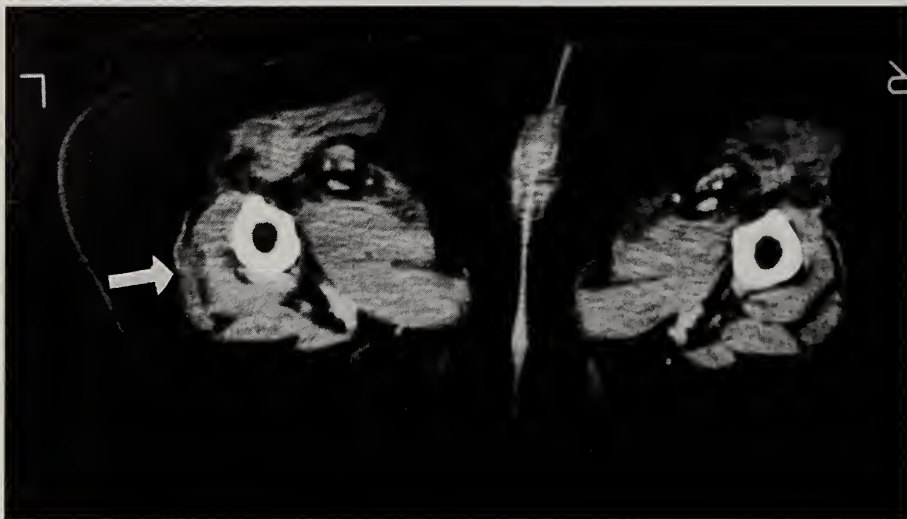


Figure 1 — CT scan of both legs demonstrating multiple fluid collections enhanced by dye at several levels.

The abscesses occur deep within striated muscle, and the infection is sharply limited by overlying fascia. Subcutaneous tissues are often spared until the infection is advanced.⁴ Pain is not striking. There is usually only minimal swelling, which has been characterized as hard, wooden, or elastic in quality.⁵ After several days or weeks, induration may appear with large abscesses that require surgical drainage. These occur mainly in the large muscles of the thigh. However, any striated muscle can be involved, as illustrated by this case. Elevated white blood cell count and fever are common; however, muscle enzymes (creatine phos-

phokinase, SGOT, and LDH) are often normal.

Medical therapy is the hallmark of treatment. The abscesses usually resolve with intravenous antibiotics. Large abscesses that do not respond require surgical drainage. Some abscesses will do better if drained early and this may decrease hospital stay. Serial CT scans should be done to confirm resolution of the abscesses.

Summary

Although rare, tropical pyomyositis can result from staphylococcal bacteremia and should be considered in the differential diagnosis of fever associated with extremity



Figure 2 — Abscess over the left thigh was incised and drained after not responding to intravenous oxacillin.

pain. The diagnosis is readily made with a CT scan. Treatment is primarily medical with surgery reserved for refractory abscesses.

References

1. Levin MJ, Gardner P, Waldvogel FA. Tropical pyomyositis: an unusual infection due to *Staphylococcus aureus*. *N Engl J Med* 1971; Jan 28.
2. Anand SV, Evans KT. Pyomyositis. *Br J Surg* 1964;51:917-920.
3. Cluff LE, Reynolds RC, Page DL, et al. Staphylococcal bacteremia and altered host resistance. *Ann Intern Med* 1968;69:859-873.
4. Sileworts MN. Myositis. In: *Infectious Disease*. Mandell, 2nd Edition, pp 812-815.
5. Miller LH, Brown HW. The serological diagnosis of parasitic infections in medical practice. *Ann Intern Med* 1969;71:983-992.

Primary Fallopian Tube Carcinoma With Coexistent Tuberculous Salpingitis: A Case Report

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Introduction

PRIMARY CARCINOMA of the fallopian tube with coexistent tuberculous salpingitis is an extremely rare event. Table 1 summarizes the findings of 15 cases that were documented after an extensive literature search. The age of the patients ranged from 36 to 52 years, with a mean age of 43. Only one of the patients had a previous known history of tuberculosis. In 10 of the 16 patients where the pregnancy history was mentioned, all suffered from primary infertility. The most common presenting symptoms were menstrual abnormalities, abdominal pain, and a fixed pelvic mass, which are common to both fallopian tube cancer and pelvic tuberculosis. None of the patients had a preoperative diagnosis of cancer or tuberculosis.

Recently, a patient presented to the gynecology service at our institution who was found to have both fallopian tube cancer and tuberculous salpingitis, which prompted our review of the subject.

Case Presentation

The patient is a 54-year-old

Clinicians should maintain an index of suspicion for fallopian tube carcinoma in perimenopausal or postmenopausal women with menometrorrhagia who fail to respond to hormonal therapy and a D and C.

woman who first presented in December, 1988, with a 15-month history of menometrorrhagia. At that time, she was found to have a hematocrit of 10.9% and an 18 cm mobile central pelvic mass that was felt to be consistent with a leiomyo-

matous uterus. Her evaluation included a cervical Papanicolaou smear which showed atypia and an endometrial sampling (Karmen cannula) which demonstrated adenomatous hyperplasia. The uterus sounded to 15 cm. A pelvic ultrasound revealed a 9x7 cm fundic uterine mass and normal adnexa. Her bleeding was adequately controlled after Depo-Provera; however, she required transfusion of 6 units packed red cells during her hospital stay. After discharge, she underwent an outpatient intravenous pyelogram and barium enema; both were negative.

The patient was readmitted March, 1989, for uterine curettage and hysteroscopy. On physical examination, she was found to be a moderately obese black female in no apparent distress. She was afebrile with stable vital signs. Examination of the chest revealed clear lung fields and a normal cardiac rhythm. Abdominal exam was remarkable for a palpable midline mass which extended to the umbilicus. This was confirmed by the pelvic examination which revealed an 18-week size mobile, tender, central pelvic mass; the adnexa could

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TABLE 1 — Summarizes the cases in the literature demonstrating primary fallopian tube CA and tuberculosis

Author	Year	Patient's Age Parity		Symptoms	Findings	Treatment	Comments
1. Von Franque	1911	38	0000	Pelvic pain ×2 years Pelvic mass Metrorrhagia Sterility Dysmenorrhea Left sided pain Sterility ×9 years Pain right iliac fossa ×10 years	Rt tube - TB Lt tube - TB/CA	TAH/BSO	Death 3 months
2. Lipschutz	1914	44	0000	Metrorrhagia Sterility Dysmenorrhea	Rt tube - TB papillary CA	TAH/BSO	
3. Lady Barrett	1915	46	0000	Left sided pain Sterility ×9 years Pain right iliac fossa ×10 years	Lt. tube - normal Rt tube - extensive TB Lt tube - TB, squamous cell CA	TAH/BSO	
4. L'Esperance	1917	35	unknown	Metrorrhagia Leukorrhea Weight loss Uterus, enlarged, fixed	Rt tube - papillary CA, TB Lt tube - TB Endometrium - papillary CA	TAB/BSO	
5. Stubler	1923	38	0000	Oligomenorrhea Dysmenorrhea Leukorrhea Pelvic mass Abdominal pain	Rt tube - papillary alveolar CA, bilateral tubal tB. metastasis to ovary, uterus, omentum, periaortic nodes	BSO	
6. Wechsler	1926	52	Unknown	Bilateral adnexal masses	Papillary cystadenocarcinoma of the fallopian tube and tuberculosis	Unilateral salpingectomy	
7. Callahan	1929	42	0000	Oligomenorrhea Sacral backaches Abdominal mass Pelvic mass	Bilateral tubal papillary CA, bilateral tubal TB	TAH/BSO	
8. Willis	1934	38	Unknown	Abdominal mass and recurrent ascites	Rt tube with papillary CA and TB, widespread Peritoneal deposits	Unknown	
9. Von Niendorf	1950	45	Germany	Lower abdominal pain Abdominal enlargement Dysmenorrhea Sterility	Papillary adenocarcinoma	Right salpingectomy	Death, 1 year
10. Cruttenden	1950	46	0000	24 cm pelvic mass Aching pelvic and back pain 12 cm pelvic mass	Left tube - TB, benign hyperplasia, adenocarcinoma Right tube - TB Uterus - leiomyoma	TAH/BSO	
11. Dickson	1952	47	0000	20 cm pelvic mass D & C → Tuberculous endometritis	Left tube - papillary adenocarcinoma Right tube - pillary adenocarcinoma in-situ TB Uterus - adenocarcinoma invading myometrium near interstitial portion of tubes	Streptomycin for 3 months PAS 4.5 mos.	Positive history of TB
13. Van Papendreht	1962		Netherlands	Menometrorrhagia Infertility Pelvic mass	Tubes - bilateral CA and TB Granulomata in ovaries, myometrium and endometrium	TAH/BSO Rifampin Izoniazid	
14. Kral	1977		Czechoslovakia ^a				
15. Vinall	1979	47	0000				

TAH = Total Abdominal Hysterectomy
BSO = Bilateral Salpingo Oophorectomy
TB = Tuberculosis
D & C = Dilatation and Curettage
CA = Carcinoma

not be palpated separately. A survey of the lymph nodes was negative, as was the stool guaiac. Laboratory values were unremarkable, with a hematocrit of 36.1% and WBC of 6.5 K/cm². A biochemical profile, chest x-ray, and electrocardiogram were all normal.

Her past medical history was noncontributory. Her family history was significant for "uterine cancer" in both her mother and daughter. She denied any past history or family history of tuberculosis; however, she admitted to a 2-year history of increasing fatigue and night sweats.

At the time of operation, examination under anesthesia revealed an 18-week size uterus with a firm 9-10 cm mobile left adnexal mass. Hysteroscopy demonstrated a large submucous myoma of the anterior uterine wall. Endocervical curettage showed fragmented endocervical glands while endometrial curettage revealed fragmented endometrial glands, with no diagnostic histopathology.

On May 9, 1989, she underwent an exploratory laparotomy which revealed a myomatous uterus and a left tubo-ovarian complex densely adherent to the bowel, which was felt to be consistent with pelvic inflammatory disease. The upper abdomen was normal with no palpably enlarged para-aortic nodes. A TAH/BSO was performed with frozen section diagnosis of the left tubo-ovarian complex demonstrating necrosis with acute and chronic nonspecific inflammation. Pelvic washings obtained intraoperatively were negative.

Pathologic Examination

The uterus measured 15x11x9 cm and was distorted by multiple leiomyomas. A separate leiomyoma measuring 14x8x8 cm was also submitted for pathologic examination. The right fallopian tube and ovary measured 4.5x2.5x2.8 cm in aggregate, with no gross abnormalities noted. The left adnexal mass measured 7x2x2 cm and was

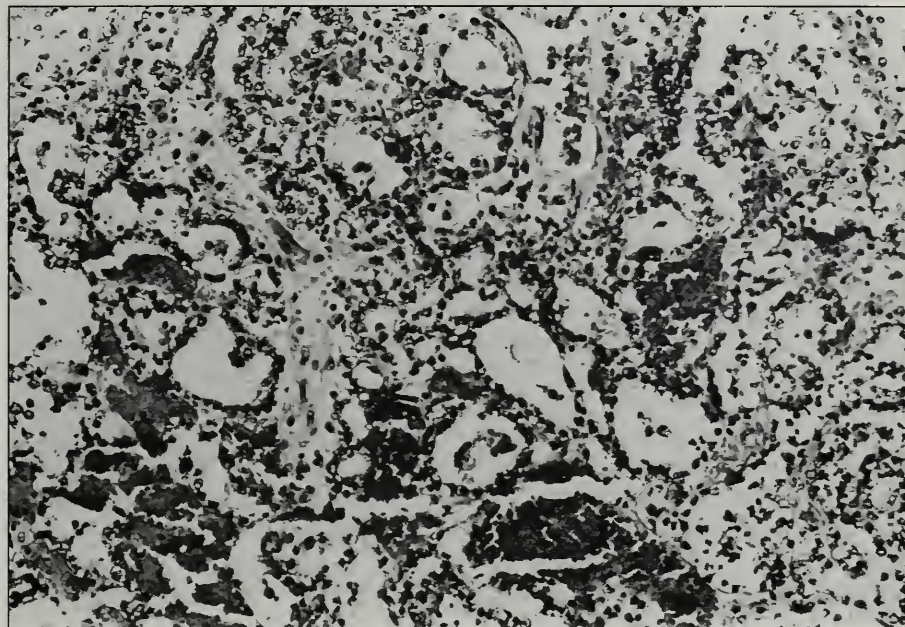


Figure 1 — Microscopic section of the fallopian tube showing an adenocarcinoma with alveolar pattern. Foci of adenocarcinoma-in-situ were identified in the tubal mucosa (Hematoxylin-eosin X 100).

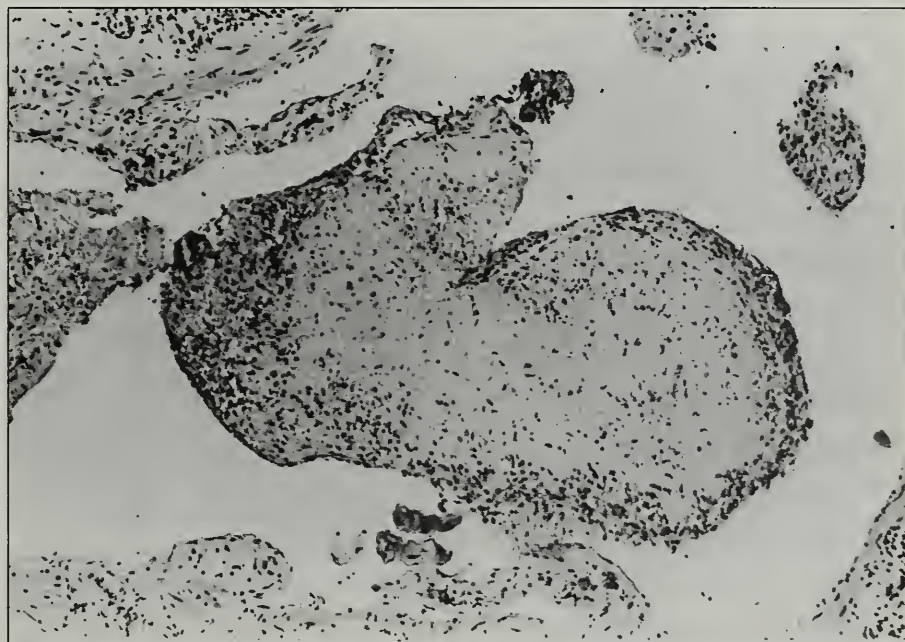


Figure 2 — Another section of the same fallopian tube showing a granuloma with central caseation. Special stain shows acid fast bacilli (Hematoxylin-eosin X 100).

mainly composed of thickened and dilated fallopian tube with no identifiable ovarian tissue. Multiple serial sections were obtained from this mass.

Microscopic sections of the fallopian tube showed a poorly differen-

tiated adenocarcinoma with both papillary and alveolar patterns (Figure 1). Multiple foci of carcinoma in situ of the tubal mucosa could be identified and traced as they invaded the tubal wall. There was transmural invasion of the tubal

wall. The tumor did exhibit focal necrosis; however, there were foci of granulomatous inflammation involving the tubal mucosa, hydrosalpinx and occasional blood vessels. These granulomas were adjacent to but distinct from the tumor described above and consisted of central necrosis with epithelioid histiocytes and occasional giant cells (Figure 2). This prompted a special stain for fungus and AFB. The latter demonstrated acid fast bacilli within the granuloma. No cultures were obtained because of the unsuspected nature of the inflammation. No granulomas were seen in the opposite fallopian tube, endometrium, or previously obtained endometrial curettage. The uterus showed benign leiomyomata. The right ovary was unremarkable. The left ovary was identified as an atrophic ovarian tissue containing a single microscopic focus of adenocarcinoma on its surface adjacent to the tubal carcinoma.

Fallopian tube adenocarcinoma is associated with a high incidence of chronic salpingitis, which is supported by the theory that the inflammatory proliferation may trigger the epithelium to malignant changes.

The patient's postoperative course was complicated by a prolonged ileus, as well as an infected vaginal cuff hematoma that responded to intravenous antibiotics. An antituberculous regimen of Isoniazid 300 mg per day, Rifampin 600 mg per day, and Pyridoxine 50

mg per day was instituted after consultation with the infectious disease team, which recommended 9 months of this therapy. The patient was also offered chemotherapy for the fallopian tube carcinoma which she refused. She was discharged in good condition. After 9 months of follow up, she is doing well and is compliant with her anti-tuberculosis medications; however, she still declines chemotherapy.

Discussion

At one time, pelvic tuberculosis accounted for almost 5% of gynecologic pathology.¹ In recent years, the incidence has diminished with the wide availability of anti-tuberculosis drugs. Consequently, there is currently little clinical suspicion of pelvic tuberculosis, which may result in the diagnosis being missed in a number of cases.

Tuberculosis of the female genital tract is usually a secondary infection, with the primary focus being elsewhere in the body, generally the lung. The major route of spread to the pelvis is most commonly hematogenous, with occasional spread via the lymphatics or by direct local extension from an adjacent location in the abdominal cavity. Primary pelvic tuberculosis has occurred infrequently, but has been reported through sexual transmission from a male partner with active genitourinary tuberculosis. Only 20% of patients with pelvic tuberculosis have a known past history of tuberculosis elsewhere.^{2,3}

Tuberculosis involving the gynecologic organs has been found to nearly always involve the fallopian tubes, followed by the endometrium in approximately 80% of cases. The ovaries are involved in about 25-30% of cases and the cervix least often, with an incidence of 5% or less. Tuberculous involvement of the vagina and vulva are described only in rare case reports.^{2,4} The diagnosis should be confirmed by cultures when possi-

ble, as identifying acid-fast bacilli histologically is generally not the best way to prove or exclude tuberculosis. The differential diagnosis of pelvic tuberculosis includes other granulomatous diseases such as sarcoidosis, Crohn's disease, lymphogranuloma venereum, granuloma inguinale, and syphilis. Other possibilities include fungus, parasitic organisms, and actinomycosis, as well as a foreign body reaction due to glove talc or retained material from prior surgery, resulting in a granulomatous inflammatory reaction.⁵

The differential diagnosis of pelvic tuberculosis includes other granulomatous diseases such as sarcoidosis, Crohn's disease, lymphogranuloma venereum, granuloma inguinale, and syphilis.

Fallopian tube carcinoma is one of the rarest of gynecologic malignancies, with an incidence of 0.3%. Carcinoma involving the fallopian tube is conventionally felt to be secondary to metastatic disease, unless no other primary source can be identified. The classic triad of clinical symptoms associated with this particular entity is pain, menorrhagia, and leukorrhea.^{6,7} The diagnosis of fallopian tube carcinoma is especially difficult to establish histologically in the face of salpingitis, which can elicit an extensive epithelial proliferation. This proliferation can be particularly striking in tuberculous salpingitis, resulting in a marked hyperplastic pattern of the tubal mucosa mimicking carcinoma.^{1,8-10} In fact, Novak¹ and Willis⁹ consider that many cases re-

ported as fallopian tube adenocarcinoma could in fact be instances of exaggerated epithelial proliferation associated with tubal tuberculosis. Consequently, careful attention to differentiate carcinoma from tuberculous hyperplastic changes is important in establishing the diagnosis.

This difficulty in establishing the diagnosis of fallopian tube adenocarcinoma casts some doubt on the accuracy of some of the earlier reports associating fallopian tube cancer and tuberculosis. Barret describes squamous carcinoma in the tube, but did not describe the cervix.¹¹ L'Esperance describes papillary carcinoma in the uterus as well as in the fallopian tube which would be generally classified as a primary endometrial cancer with secondary metastasis to the fallopian tube.¹² Stubler describes papillary alveolar carcinoma of the fallopian tube, uterus, ovary, omentum and para-aortic nodes which would also not be consistent with a primary fallopian tube carcinoma.¹³ The uterus and ovaries were also not evaluated in Wechsler's⁶ and Cruttenden's¹⁴ patients who were both treated with only unilateral salpingectomy. This suggests that the true incidence of fallopian tube carcinoma with coexistent tuberculous salpingitis may be even smaller than once thought. In our case, a possibility of primary ovarian carcinoma with secondary tubal involvement was considered and ruled out by multiple serial sections showing both in situ and invasive components of tubal carcinoma.

Fallopian tube adenocarcinoma is associated with a high incidence of chronic salpingitis, which is supported by the theory that the inflammatory proliferation may trigger the epithelium to malignant changes.^{1,9,14,15} The possibility that tuberculous salpingitis in particular may predispose to carcinoma has been suggested by several authors,

but with the small number of cases reported this is difficult to verify. Dickson¹⁶ and Callahan¹⁷ feel that the association of tuberculosis with fallopian tube cancer is purely coincidental. Furthermore, a review of 230 cases of fallopian tube carcinoma by Seldis¹⁸ in 1961 demonstrated 7 cases (3%) with coexistent tuberculosis, which he interpreted as not being significantly higher than the 0.4 to 2% incidence of pelvic tuberculosis in the general population. Therefore, the significance of the association between primary fallopian tube carcinoma and tuberculous salpingitis remains undetermined.

The therapy for patients with fallopian tube carcinoma and tuberculosis is often a dilemma for the clinician. Usually, patients with fallopian tube carcinoma, Stage II through Stage IV or any stage with positive peritoneal washings, are offered adjunctive therapy following their surgical treatment, often a Cisplatin-containing regimen and progestin chemotherapy, intraperitoneal radioactive chromic phosphate, or external beam radiation therapy.¹⁵ However, when coexistent pelvic tuberculosis is present, the patient should first be treated with an antituberculosis regimen. The initiation of cancer chemotherapeutic agents may result in immunocompromising the patient, with subsequent dissemination of the tuberculosis. Under such circumstances, the tuberculosis may be more rapidly fatal than the carcinoma.

Summary

A case of primary carcinoma of the fallopian tube with coexistent tuberculosis has been presented, and previously reported cases in the literature reviewed. These cases represent a rare occurrence where the diagnosis might be missed without a thorough pathologic evaluation. Clinicians should maintain an index of suspicion for fallopian

tube carcinoma in perimenopausal or postmenopausal women with menometrorrhagia who fail to respond to hormonal therapy and a D and C.^{15,19} The finding of a tubo-ovarian abscess in a postmenopausal woman should also cause concern for tubal carcinoma, as it is usually a disease of menarcheal women. Similarly, a possibility of granulomatous salpingitis should always be borne in mind in the differential diagnosis of inflammatory diseases of the fallopian tube.

References

1. Novak ER, Woodruff JD. Gynecologic and obstetric pathology. W.B. Saunders, Philadelphia, 1979, pp 328-333.
2. Sutherland AM. Gynaecological tuberculosis: Analysis of a personal series of 710 cases. Aust N Z J Obstet Gynaecol 1985;25:203-207.
3. Schaefer G. Tuberculosis of the female genital tract. Clin Obstet Gynecol 1970;13:965-998.
4. Nogales-Ortiz F, Tarcinon I, Nogales FF. The pathology of female genital tuberculosis. Obstet Gynecol 1979;53:422-428.
5. Wolskel HG, Barnett VH, Symons M. Carcinoma and tuberculosis of the fallopian tubes. J Obstet Gynec Br Empire 1953;60:535-537.
6. Wechsler HF. Primary carcinoma of the fallopian tubes. Arch Path 1926;2:61-205.
7. Benedet JL, White GW, Fairey RN, Boyes DA. Adenocarcinoma of the fallopian tube. Obstet Gynec 1977;50:654-657.
8. Vinall PS, Buxton N, Cowen PN. Primary carcinoma of the fallopian tube associated with tuberculous salpingitis, a case report. Br J Obstet Gynec 1979;86:984-989.
9. Willis RA. Pathology of Tumors. Butterworth and Company, London, 1960, pp 518-526.
10. Pufflett D. Tuberculous salpingitis resembling adenocarcinoma. Med J Australia 1972;2:149-151.
11. Barret L. Reports of societies. J Obstet Gynec Br Empire 1915;27:200-201.
12. L'Esperance ES. Proceedings New York Path Soc 1917;17:148.
13. Stubler E. Mschr Geburish Gynak 1923;62:173.
14. Cruttenden LA, Taylor CW. Primary carcinoma of fallopian tube. Report of a case superimposed on tuberculous salpingitis. J Ob Gynec Br Empire 1950;57:937-940.
15. Disaia PJ, Creasman WT. Clinical Gynecologic Oncology. C.V. Mosby Company, St. Louis, 1989, pp 450-457.
16. Dickson WPG, Lodge KV, Woodcock AS. A case of primary carcinoma of the fallopian tube associated with tuberculous salpingitis. J Obstet Gynec Br Empire 1952;59:834-837.
17. Callahan WP, Schiltz FH, Helwig CA. Primary carcinoma of the fallopian tubes associated with tuberculosis. Surg Gynec Obstet 1929;48:14-22.
18. Sedlis A. Primary carcinoma of the fallopian tube. Obstet Gynecol Surg 1961;16:209-226.
19. Tang LCH, Cho HKM, Wong Taam VCW. Atypical presentation of female genital tract tuberculosis. Europ J Obstet Gynecol 7:355-363.

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Management of the Obstructed Ureter: Another Indication for Video Laparoscopy

Charles R. Gershon, MD, J. Stuart McDaniel, MD

THE QUESTION that many general surgeons are asking themselves these days is, "What took us so long to use the laparoscope?" Gynecologists have been gaining experience in laparoscopy for over 20 years, virtually in a vacuum. Much of this experience was with direct vision laparoscopy (in which one looks directly through a lens) and not with the new video laparoscopy (in which one looks at a video screen). The first laparoscope to examine the peritoneal cavity was a cystoscope.¹

Urologists are beginning to use the laparoscope cautiously and with guarded optimism. Laparoscopy has been used for several years to localize undescended testes in boys.^{2,3} In contrast, however, interest in adult urologic application is recent. Much of this interest has been fueled by Dr. William W. Schuessler, of San Antonio, and Dr. Howard Winfield, of The University of Iowa. Their main focus has been in teaching urologists to use the video laparoscope for pelvic node dissections prior to the treatment of prostate neoplasms and varicocelectomies for infertility.⁴ Acceptance of these techniques has been,

Urologists are beginning to use the laparoscope cautiously and with guarded optimism. One can envision the day renal biopsies, bladder diverticulectomy, treatment of invasive bladder tumors, etc., will be done laparoscopically.

as previously mentioned, cautious. Dr. Ralph Clayman at Washington University in St. Louis has even done a laparoscopic nephrectomy. This surely is not a procedure that will be done in the near future in your local hospital. The authors recently had an interesting case in which we were able to avoid open

surgery in a situation which, heretofore, would have required such.

Case Report

In January, 1989, a 73-year-old female presented with a left-sided invasive transitional cell carcinoma of the bladder. A transurethral resection of this neoplasm was done. The need for cystectomy was discussed, but the patient elected for conservative therapy, with follow-up resections and intravesical chemotherapy.

The patient was doing quite well until December, 1990, when she experienced severe right flank pain. An excretory urogram demonstrated an acute obstruction of the right kidney. We knew that this had not been present 2 months earlier, as she had had a bilateral renal ultrasound in following up a left renal cyst in October, 1990 (Figure 1).

The patient underwent a cystourethroscopy and a retrograde pyelogram which demonstrating a mass posteriorly in the bladder with a high grade obstruction of the right ureter and kidney (Figure 2). A CT scan of the pelvis revealed an obstructed distal ureter with an enlarged uterus, but no extrinsic mass

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Figure 1 — Normal right renal ultrasound, October, 1990.

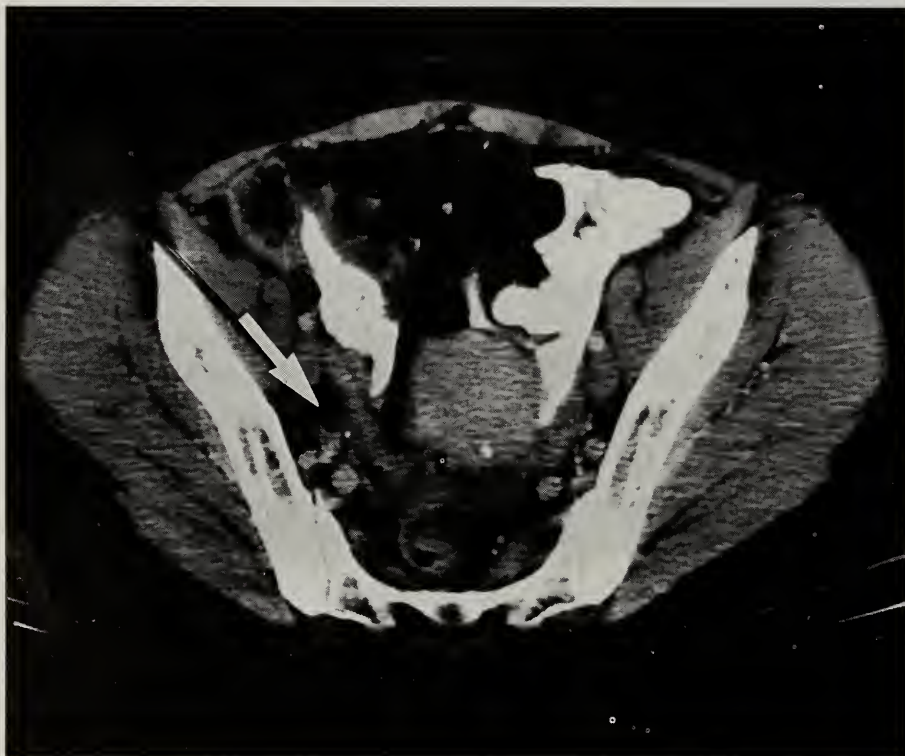


Figure 3 — CT scan of pelvis. Arrow points to dilated distal ureter with no obvious extrinsic mass.

compressing the ureter was visible (Figure 3).

It was necessary to determine if this was an intrinsic or extrinsic compression. Based on the CT

scan, we felt that it was an intrinsic stone or neoplasm. A ureteroscopy was done which demonstrated that the area of narrowing was, in fact, extrinsic, since it was possible to



Figure 2 — Retrograde pyelogram demonstrating obstructed right ureter; point of narrowing shown.

put the ureterscope past the obstruction up into the kidney. At this time a double J catheter was left in situ. Further imaging studies were considered, but a pelvic laparoscopy was thought to be the most direct approach.

A video laparoscopy was performed which revealed a large hydrosalpinx with several adhesions around the tube and on the posterior peritoneum. The hydrosalpinx was aspirated, and a portion of the tube was removed.

A video laparoscopy was performed which revealed a large hydrosalpinx with several ad-



Figure 4 — Normal intravenous pyelogram 6 weeks postoperatively.

hesions around the tube and on the posterior peritoneum. The hydrosalpinx was aspirated, and a portion of the tube was removed. In addition, the ureter was dissected away from the tube down to the bladder, and adhesions around the ureter were completely freed through the laparoscope. The patient did quite well during the procedure and went home on the same day. An intravenous pyelogram 6 weeks postoperatively was normal (Figure 4).

Discussion

Laparoscopy is still in its infancy in genitourinary surgery. However, as the challenges of the learning curve in laparoscopy are overcome, and the instrumentation improves, the laparoscope will cer-

tainly take its place in the urologist's armamentarium as we progress toward minimally invasive surgery. In addition to the aforementioned nephrectomy, one can envision the day in which such things as renal biopsies, bladder diverticulectomy, repair of intraperitoneal bladder ruptures, bladder suspensions, and even treatment of invasive bladder tumors will be done laparoscopically.

References

1. Gunning JE. History of laparoscopy. In, Phillips JM, Carson SL (eds), *Laparoscopy*. Baltimore, Williams and Williams, 1977, p 6-16.
2. Silber SJ, Cohen R. Laparoscopy for cryptorchidism. *J Urol* 1980;124:928-929.
3. Malone PS, Guiney EJ. The value of laparoscopy in localizing the impalpable testis. *Br J Urol* 1984;56:429-431.
4. Winfield HN. Suddenly, urology takes up the laparoscope. *Contemp Urol* 1991;3(1):70-80.

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The American Cancer Society's Rehabilitation Programs: Toward A Comprehensive Cancer Cure

Carol Hughes, RN, MSN

DEVELOPMENTS in the early diagnosis of cancer and greater effectiveness of cancer treatment modalities ensure that more than 50% of those diagnosed with cancer will be disease free in 5 years. But before we proclaim victory with the increased longevity, we must measure these improved survival rates against the patient's quality of life. We may have cured the cancer, but have we cured the patient? Or have we left him or her to struggle with the emotional, physical, and social challenges that the illness (and the cure) has created?

Persons facing a diagnosis of cancer are exposed to a myriad of rehabilitative challenges. As a result of cancer and the treatment, alterations in body image often occur, causing the patients overwhelming despair. Examining the patient's emotional, physical, and cosmetic needs are essential to restoring them to the highest possible level of functioning. Even patients who are well prepared in advance by proper instruction and advice sustain a blow and threat to their security and self-esteem.

To facilitate the challenges of total rehabilitation for the cancer patient, the American Cancer Society sponsors programs to accomplish this personally. All of the programs are designed to enhance an individual's quality of life. Several of these programs incorporate the "peer support" concept, embracing the notion that the devastating

‘As a vital member of the health care team, physicians are in a unique position to initiate patient involvement into these programs that use former patients and other volunteers to provide needed information and support. 9

threat to a person with cancer can only be fully understood by one who has had a similar experience.

One particularly innovative rehabilitative program called **Look Good . . . Feel Better** was launched in March, 1989. The program was developed by the Cosmetic, Toiletry, and Fragrance Association Foundation in cooperation with the American Cancer Society and the National Cosmetology Association. Female cancer patients, through practical

hands-on experience, learn of beauty techniques that can help restore their appearance and self image, and thereby help them cope with appearance-related side effects of chemotherapy and radiation therapy.

Cosmetology professionals volunteer their time to teach women skills to improve their appearance. Before cosmetologists can participate in this program, they must have training on the special needs of the cancer patient. For many women, cosmetics can actually be therapeutic. To some it may appear to be a superficial matter, but appearance has a much deeper meaning for many women.

Another emerging program in Georgia, **CanSurMount**, matches successfully adjusted and medically stable cancer patients for one-to-one limited-term visitations. The CanSurMount program was founded over 15 years ago in Denver, Colorado, by medical oncologist, Paul Hamilton, MD, and his patient, Lynne Ringer. They recognized that those who have experienced cancer may be uniquely qualified to understand the fears and concerns of other cancer patients. Volunteer visitors and patients are matched by cancer type and site, age, sex, and other factors that might contribute to mutual support and communication. The volunteers are carefully selected and trained; they do not offer medi-

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This article was prepared at the request of the American Cancer Society, Georgia Division.

cal advice or compare their own treatment with that of the patient.

A more established program, **Reach to Recovery**, was founded by Terese Lasser of New York City in 1952 and has been an integral part of the American Cancer Society since 1969. Carefully selected and trained volunteers who have fully adjusted to their breast cancer experience visit the patient by appointment after physician authorization. The Reach to Recovery volunteer brings appropriate literature for the patient. If a mastectomy has been done, the volunteer brings a kit containing a temporary breast form and provides information on types of permanent prostheses and where they can be obtained.

Because of new approaches to the management of breast cancer, the Reach to Recovery program now has volunteers available who

have undergone breast conservation surgery, radiation therapy, and chemotherapy. Volunteers who have had breast reconstruction are also available to visit women needing more information about this aspect of rehabilitation. Again, the Reach to Recovery volunteer does not give medical advice; she only conveys her own positive experience and serves as a recovered breast cancer patient role model.

Similar to other American Cancer Society programs, the **Laryngectomy Visitor Program** has volunteers available to see patients pre and postoperatively to provide emotional support and practical information facilitating rehabilitation of the laryngectomized person. Visitors for this program are provided by the International Association of Laryngectomees (IAL). The American Cancer Society has sponsored the IAL since the formation of the

organization in 1952. Regardless of how long ago the patient had a laryngectomy, s/he may greatly benefit by knowing about this program. Some laryngectomees who have been speechless for as long as 10 years are now able to speak.

The success of these programs has underlined the fact that a true, comprehensive rehabilitation of the cancer patient to a near-normal lifestyle must involve teamwork and must continue past the medical cure. As a vital member of the health care team, you are in a unique position to initiate patient involvement into programs that use former patients and other volunteers to provide needed information and support.

These service programs are available to cancer patients at no charge. For more information on the rehabilitation programs, contact your Division/Unit of the American Cancer Society.

Strategies for Saving Money and Minimizing Risk on Your Next Office Lease

*M. Suellen Henderson, Atlanta**

OFTENTIMES, one of the more unpleasant aspects of starting a practice or relocating an office is negotiating a lease for professional office space. Initial discussions with the landlord's leasing agent may be limited to simple issues such as base rent, term, renewal rights and tenant finish allowance. If a term sheet or letter of intent is prepared, it will often be limited to the most basic terms, but may also contain a statement that the final lease will contain the landlord's "standard" terms and conditions.

These "standard" terms and conditions, as set forth in the lease, will probably go far beyond any of the simple matters discussed in preliminary negotiations. The lease itself is usually a very lengthy and difficult document and is likely to contain numerous traps for the inexperienced or unwary tenant.

This article describes several different tenant strategies for saving money and limiting overall exposure on office leases. This article is not intended to be an exhaustive discussion of issues which are important to tenants. The following items, however, should be on any tenant's checklist for review of an office lease.

1. Square Footage. Most tenants blindly accept the landlord's determination of square footage in the office space. Typically, the square footage of the premises will determine both the base rent and the common area maintenance

‘A lease itself is usually a lengthy, difficult document which is likely to contain traps for the inexperienced tenant. This article describes several different tenant strategies for saving money and limiting overall exposure on office leases.’

("CAM") charges. Even a relatively small discrepancy in the square footage can result in substantial overcharges over a long-term lease.¹

Square footage may be designated as either "usable" (the actual area within the premises) or "rentable" (the "usable" square footage, multiplied by a factor designed to attribute a pro-rata portion of the common areas in the building to each tenant). If "rentable" square footage is employed, the landlord should be asked to ex-

plain the basis for the common area factor.

There are several ways to check the landlord's calculations. Floor measurements on site plans or construction drawings for tenant finish work can be added together, or the tenant may actually measure the interior of the premises himself. Some landlords may agree to a short period of time after occupancy (e.g., ten days) for the tenant to identify any square footage discrepancy.

2. Commencement Date. The lease will contain a target "commencement date," the date on which tenant finish work is substantially completed, the lease term commences and the tenant begins occupancy. The commencement date may be stated as an actual date (e.g., September 1, 1992) or as a specified number of days (typically 30 to 60) after execution of the lease. Many leases, however, give the landlord the ability to postpone the commencement date without penalty. Unless the tenant has the ability to remain at his former location on a month-to-month basis until completion of the new space, postponement of the commencement date can have disastrous consequences.

To avoid potential problems, landlord and tenant should agree to a commencement date which is feasible for the landlord, its architect and contractor to meet. Feasibility of the date will largely depend on the complexity of the

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tenant finish work to be completed. The lease should also include penalties for the landlord's failure to deliver the space on time. The most effective penalty allows the tenant to terminate the lease if the commencement date is postponed for more than a specified number of days (e.g., 30). The landlord can also be made responsible for the tenant's losses arising from the delay (e.g., the excess of holdover rent over otherwise applicable rent).

The tenant should also confirm that he is not responsible for payment of rent until actual occupancy and that any "free rent" period is not shortened by postponement of the commencement date. Poor lease drafting may result in either of these unintended results.

3. CAM Charges. Lease provisions regarding the pass-through of CAM charges should always be closely scrutinized by the tenant, since such charges will become a part of the tenant's monthly rent. The tenant should make certain that he understands how the CAM charges work and that he and all other tenants in the building are treated equally.²

At a minimum, the lease should contain a list of items which *may* be added to CAM charges (e.g., real estate taxes, basic utilities, insurance, maintenance and other services) and a list of items which *may not* be included. The landlord should not be able to pass through costs for items such as income taxes, rental concessions and commissions on other space in the building, items for which the landlord is reimbursed directly by insurance or other tenants, any general overhead which is not directly related to the building, depreciation, mortgage payments or other financing costs. The lease should also provide a mechanism for the tenant to review CAM pass through charges

at the end of the year and receive a prompt refund or credit for any overpayment.

Finally, if the building is less than fully occupied, the tenant should not be responsible for paying more than his pro-rata share of CAM charges. The formula for dividing CAM charges should assume a building occupancy equal to the higher of actual occupancy or 95% occupancy.

4. Services. The lease should set forth the specific services which the landlord is required to provide (e.g., janitorial, security, HVAC and electrical). Even if these obligations are expressed, however, the lease may not impose a meaningful penalty on the landlord for interruption of such services. Moreover, the lease may expressly prohibit the tenant from abating rent due to interruption of services. The tenant can be placed in the unenviable position of not being able to effectively conduct business, but having no adequate remedy against the landlord.³

The tenant should insist upon a penalty for interruption of services which substantially interferes with his practice. If the interruption is the landlord's fault, rent should abate during the entire period of the interruption. If interruption is outside the landlord's control, rent abatement should begin after some period of time (e.g., three to ten days) and continue until services are restored.

5. Landlord's Repairs. The lease should specifically identify repairs for which the landlord is responsible.⁴ The lease should impose a time period within which the landlord must commence repairs which have been validly requested by the tenant. In addition, some repairs may be extremely disruptive to the tenant's practice. For the tenant's protection, the lease should include the same type of rent abatement provision discussed

above with respect to interruption of services. For example, if repairs substantially disrupt a tenant's practice for more than a specified number of days, rent should abate from and after such date until the disruption ends.

6. Relocation of Space. Many leases contain a provision allowing the landlord to relocate the tenant within the building on 30 to 60 days' prior written notice. This provision protects the landlord's ability to sign new tenants who may need an entire floor or adjoining floors in the building.

If the tenant's particular space is unique and important to him, he should not agree to this provision. If space within the building is basically fungible, the tenant may accept this provision, but should insist on certain conditions as follows: (a) the new space must be comparable (e.g., in terms of size, age, location, elevator and parking access, etc.), (b) the landlord must pay for all of the tenant's out-of-pocket expenses associated with the move⁵ and (c) at his option, the tenant should be able to terminate the lease rather than relocate.

7. Default. The consequences to a tenant of defaulting under a lease are quite onerous, usually including the acceleration of all remaining rents under the lease.⁶ The landlord will be extremely reluctant to limit any of its remedies upon default. The tenant should, therefore, obtain as much flexibility as possible to cure defaults under the lease. The tenant should request a five day period to cure monetary (rent) defaults and a 20 to 30 day period to cure non-monetary defaults. The tenant should also ask that the cure period commence on the date he receives written notice of the default from the landlord, not on the date of the default.⁷

8. Death/Disability Riders. If a tenant is in practice by himself, death or disability will result in clo-

sure of the office. Unfortunately, closure for such reason will not relieve either the tenant or his estate from on-going liability under the lease. The sole practitioner should request a "death or disability" lease rider, pursuant to which liability under the lease is limited to (a) a specified number of months after the death or disability (six to twelve) *plus* (b) the unamortized cost of any tenant finish improvements completed especially for the tenant. The tenant may want to obtain disability insurance to cover this defined exposure.

9. Security Deposit. The landlord should be obligated to refund the tenant's security deposit or give a written accounting as to its application within 30 days after termination of the lease.

10. Insurance. The tenant should provide his insurance agent with a copy of all provisions in the lease which deal with required insurance coverage. The agent is in the best position to determine whether the requested coverages are excessive. The agent can also ensure that the tenant's actual coverage complies with the lease requirements.

11. Assignment and Subletting. Most leases will contain an absolute prohibition on the tenant's ability to assign or sublet his lease. At a minimum, the lease

should require that the landlord be "reasonable" in evaluating potential sub-tenants or assignees.

12. Tips for Negotiating the Above Issues. Negotiation of any lease depends upon the relative bargaining position of the parties. If space in a building is at a premium, the tenant may not be very successful with any of the above issues. In today's market, however, a tenant should be able to make some progress on many of the items listed above.

Because a landlord may be reluctant to concede on every point, a tenant should identify those issues in the lease which are most important to him. To identify these issues, the prospective tenant may want to contact one or more existing tenants in the building prior to negotiating the lease. The prospective tenant should ask for a candid assessment of the landlord's performance at the building. If problem areas are identified, the new tenant should insist that these areas be addressed in his lease.

One final piece of practical advice — landlords love to negotiate lease points by arguing that particular language is "required by our lender," but would *never* be enforced by the landlord. No matter how comfortable a prospective ten-

ant feels about his new landlord, he must always remember that the building may be sold or foreclosed upon during the term of the lease. When a problem arises, the tenant may be dealing with a new owner or the special assets department of a bank. The tenant's only long-term protection lies in the actual language contained in the lease.

NOTES

1. For example, assume a 50 foot discrepancy on space having an initial base rate of \$16 per square foot and CAM charges of \$5 per square foot. There will be an initial annual rent overcharge of \$800 and an initial annual CAM overcharge of \$250. This overcharge will increase annually as rent and CAM charges increase. Over a ten year term, overcharges would exceed \$10,000.

2. For example, a tenant which uses excessive amounts of electric power should pay for such excess consumption himself. This cost should not be spread among the other tenants in the building.

3. For a worst case scenario, imagine having office space on the tenth floor of a building in which elevator service is interrupted for an extended period of time.

4. Areas of responsibility should include everything *outside* of the premises, e.g., repairs to building foundations, roof, exterior walls, landscaping, parking areas, mechanical systems, etc.

5. These would include moving expenses, computer and telephone system relocation, postage changes for notices to patients and printing changes for new stationery, invoices, business cards and other printed material containing the new suite number.

6. Under current Georgia law, acceleration clauses may be unenforceable if they do not provide for discount of the income stream to present value.

7. To control habitual late payments, the landlord may want to limit notices of *rent* defaults to two or three times a year. This is a reasonable position for the landlord to take.

PHYSICIAN WANTED

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Send resume to Richard Cunningham, Georgia Division of Public Health, Room 206, 878 Peachtree St., Atlanta, GA 30309; 404-894-6582. EOE. Deadline February 28, 1992.

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ADVERTISING INDEX

American Heart Association	92
American Medical Association	68,86
Cheraw Family Medicine	54
Classified Ads	92
Georgia Hospital Association	47
Health Quip, Inc.	47
Knoll Pharmaceuticals	46, 47
Lilly, Eli & Company	56, 57
MAG Mutual Insurance Company	58
Mississippi Methodist Rehabilitation Center	52
Palisades Pharmaceuticals, Inc.	57
Remote Imaging	48
Searle, G.D.	96
U.S. Air Force	85
U.S. Air Force Reserve	54
U.S. Army Reserve	82
Vein Clinics of America	95

MANUSCRIPT INFORMATION

MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely to this *Journal*. **Manuscripts should be submitted on a 5¼" disc or a 3½" diskette compatible with IBM WordPerfect 5.1 or in ASCII format. Hard copy (double spaced, typewritten) should be sent with the disc/diskette.** Hard copy should be submitted in duplicate. Receipt of manuscripts will be acknowledged.

STYLE — Articles should range in length from 3000 to 4000 words. Footnotes, references, and photo legends should be typed on separate sheets, double-spaced. References should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages. **Articles with references that do not conform to the *Journal's* style will be returned.**

Sorter NA, Wasserman SI, Austen KF.
Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

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MEDICAL EDITING SERVICES — If in the opinion of the *Journal* Editorial Board, material submitted for publication could be improved by a Medical Editing Service, the Editor will contact the author for his or her approval. Association members needing assistance in preparation of material for publications may also use this service. A reasonable charge is made for this service and the cost of this will be borne by the author.

Cardiologic Reflections

"Death visited Hall County Hospital Sunday night on one of its periodic rounds and stopped to claim a patient, but physicians armed with a new technique and a machine fought back — and won."

*The Daily Times
Gainesville, Georgia
May, 1962*

LITTLE DID ANYONE know at the time these words were printed in our local newspaper almost 30 years ago that the care of our patients soon would be drastically and irrevocably altered. I had just completed rounds and was leaving for home when I heard the familiar page from the emergency room. Upon arrival there, I found Troy, one of my young coronary patients. Troy had familial hypercholesterolemia and angina pectoris, but on this night he had experienced severe substernal pain as he drove home from a fishing trip.

Troy had an obvious acute myocardial infarction. Oxygen and IV morphine were administered and a venous line inserted. These were the cardiologist's only tools prior to the days of routine cardiac monitoring and the coronary care concept. I accompanied Troy to his bed on the medical floor and later

while writing orders, his nurse announced his cardiac arrest. Remembering the newly acquired defibrillator housed nearby, I promptly sent for it and sped to Troy's room.

Many young doctors would not recognize this crude defibrillator, which utilized AC current and was made at Johns Hopkins Medical School prior to commercial availability. I remember hoping that it worked as well on humans as it had on the dogs in Dr. Kouwenhoven and Dr. Jude's lab. Having seen too many patients die with ventricular fibrillation, however, I had my doubts about its effectiveness.

Cardiopulmonary resuscitation was begun; EKG was called and, as expected, ventricular fibrillation was present. We turned the defibril-

lator to "adult" and Troy was defibrillated with a sudden jolt. He regained consciousness for a few minutes only to degenerate back into ventricular fibrillation. After a second shock was applied and antiarrhythmic drugs were started, he again converted to a normal sinus rhythm. Troy stabilized and remained stable throughout the night; he was discharged from the hospital 7 days later.

My patient survived to fish many more times and then died suddenly 5 years later while on a hunting trip. The quality of life was good for Troy during those 5 years. Our small hospital had witnessed the birth of the high technology era — and things were never to be quite the same again.

*W.D. Stribling, III, M.D.
Cardiologist
Gainesville*

Of Country Music — Of Who We Are and Who We Wish To Be

Charles R. Underwood, MD

"In comparison with most men, few things touch me, or, to put it better, hold me; for it is right that things should touch us, provided they do not possess us. I take great care to augment by study and reasoning this privilege of insensibility, which is naturally well advanced in me. I espouse, and in consequence grow passionate about, few things. My sight is clear, but I fix it on few objects; my sensitivity is delicate and tender. But my perception and application are hard and deaf: I do not engage myself easily. As much as I can, I employ myself entirely upon myself; and even in that subject I would still fain bridle my affection and keep it from plunging in too entirely, since this is a subject that I possess at the mercy of others, and over which fortune has more right than I have. So that even in regard to health, which I so esteem, I ought not to desire it and give myself to it so frantically as to find illnesses therefore unbearable. One must moderate oneself between hatred of pain and love of pleasure; and Plato prescribes a middle way of life between the two.

But the passions that distract me from myself and attach me elsewhere, those in truth I oppose with all my strength. My opinion is that we must lend ourselves to others and give ourselves only to ourselves. If my will happened to be prone to mortgage and attach itself, I would not last; I am too tender, both by

nature and by practice."

Of Husbanding Your Will
MICHEL DE MONTAIGNE

"Crazy"

*Crazy, I'm crazy for feeling so lonely,
I'm crazy, crazy for feeling so blue.
I knew you'd love me as long as you
wanted,
And then someday leave me for
somebody new.
Worry, why did I let myself worry,
Wondering, what in the world did I
do?
Crazy, for thinking that my love
could hold you.
I'm crazy for trying, and crazy for
crying,
And I'm crazy for loving you.*

As sung by Patsy Cline

ITHOUGHT FOR A LONG TIME that country music comes as close as do any of the arts to unabashedly expressing who we are and what we are like. When one realizes that such luminaries as Jimmy Carter, he put Willie Nelson on the high road to success you know, and Zell Miller embrace such music, then it can hardly be questioned that such an appreciation surely serves as a benchmark of a person's level of sophistication if not intellect. Growing up in a rural area it was little more than natural that one came to whistle and hum such tunes as "Home on the Range" on weekdays and "Shall We Gather at the

River" on Sundays. It was sort of expected.

So it was then that my aging and hopeful maturing led in adulthood to a close association with that branch of the performing arts which we call country music. Beyond simple enjoyment, however, itself reason enough to spend time, is the social utility of the thing. When in mixed company I speak now of the sophistication of the arts, I find it useful if not comforting to mention Garth Brooks and Patsy Cline when talk turns to arpeggios or allegros. And then from a more personal and emotional aspect, who has not fought back tears when the strains of "Have You Told Her That She's Sleeping in the Bed You Made For Me" come plaintively from the settling on the radio at 101.5FM — the station which concentrates on "crying, loving or leaving" music?

Well, for the past month, when it has been too cold and wet to cut the grass in my town, I have been thinking about such things. Thinking about how country music speaks to us about ourselves. How it mirrors our desires and our thoughts. Indeed our very lives. For certain it is that *Hamlet* comes to mind when the evening news brings us views of blood on the streets of south Atlanta or Buckhead, and when Mr. Dukakis appeared in our last election *Pagliacci* seemed to be on the television

screen, but I must say that only in country music do we really, and with the most useful realism, see ourselves. Let me show you. Let us use the tunes of country music to remove our masks and reveal our faces as they really are.

“Did You Tell Her That She’s Sleeping in the Bed You Made For Me.” Now that is one which can make you cry. It surely turns one thoughts to the agony that must go through many of us that have thought of separation or divorce, let alone simply promiscuity. I believe such a question would keep running through my head, disturbing restless sleep, should I be the one who made that bed. The song speaks of truth and honesty to any of us who have gazed with passion at one outside the marital commitment. Or outside the moral commitment itself outside marriage. The moral commitment made between “co-habiting singles.”

“Crazy.” Patsy Cline did that song first as far as I know. She is still the only one who can sing it and make me quit reading whatever I am reading, however entranced I am. I even stop watching the Duke basketball team beat the living daylights out of Georgia Tech to listen to Patsy Cline sing those words for the ten thousandth time. She was hitting the very peak of her career, you know, when that private airplane crash took her life. And yet, she still seems about as alive today as ever. I never saw Patsy Cline in person, although I would have given most anything to have done so. She seemed to be thinking about what she was singing. She seemed to mean it. And when she sang “Crazy” she certainly spoke to the total lack of rational thought which we so often give to a male/female relationship. Particularly, I suppose, to an affair.

Some part of our emotional milieu, perhaps it’s hypothalamically modulated, takes over, and the predictable and calculative aspects of our mental processes disappear. Perhaps that is good. Perhaps that is the only way that some of our relationships could ever develop and persist. The song always reminds me of a piece of old country philosophy, I am not sure where it came from but perhaps it sounds like Will Rogers, who suggested that we need to “propose under the glare of the midday sun rather than in the glow of the midnight moon.

“The Whiskey Ain’t Working Anymore.” Now that song goes on to have a line in it that says, “I need a warm and willing woman.” Certainly it says something that anyone who had dropped to the depths of alcoholic addiction would tell you very quickly. They will tell you that early in the experience, their courage and bravery and savoir faire came from a couple of drinks, then it came from two and then three and then six, and then before they really knew it “the whiskey wasn’t working any more.”

We have the best program for rehabilitating the “impaired physician” in the state of Georgia that exists anywhere in this entire country. I was told by my son who practices in Florida the other day that in that state a physician involved in an automobile accident who on the scene has a positive breath alcohol analyzer test is questioned no further — they are simply given a note that basically says “your license has been suspended. You have an appointment at the clinic in Atlanta next week.” Now that is a tribute to our program. It is also a mighty tough and in a sense unrealistic approach to the problem.

But, about the song, it does remind us that if whiskey allows us to do something which we cannot do

without it, then there is a problem waiting down the road.

“Don’t We All Have the Right to be Lost Now and Then?” Lord Almighty, don’t I agree with that one. There come times in my life, and I surely hope in the lives of others, so that I feel a bit more normal, when I just need to get lost. Not permanently. Not irrevocably. I just need to sit down with myself and think about things a little bit.

We had an anesthesiologist at my place one time. It was several years ago. I met him on our elevator one morning standing facing the wall and talking to himself. We found out later that he was shooting speed. He was lost. Now, I don’t mean that kind of thing but somewhere in our lives there needs to be some real solitude.

“Behind Closed Doors.” That song goes on to talk about the fact that no one really knows what goes on behind those closed doors. We have a little bit of that problem at my house. I have a habit of closing doors. Particularly I close them into our library. It keeps the heat in for one thing. It also helps me get lost in a sense. I have always tended to do it. But Ellie is the other way. She opens them all. I go around the house closing doors. She goes around opening them. It is only when the temperature gets below 30° that I seem to rule.

But the song reminds me that sometimes as physicians we tend to operate “behind closed doors.” We talk about “turning off the recorder” when we are having a particularly sensitive discussion. We tend to protect ourselves when perhaps that really is not necessary and often counterproductive.

I have been writing letters to our hospital administrator for at least 20 years now, suggesting that our medical staff form an ethics committee. We need it when delicate

decisions concerning the continuation of unproductive life-preserving measures is an issue. That type thing. And yet only recently we ourselves, as physicians, once again voted that down. It worries me that it is a subtle indication that we have areas in our lives, in our professional lives, that we would rather not expose to others. But I plan to keep writing those letters about the ethics committee. I plan to put it in my last will and testament.

“When It Comes to Love You Don't Count the Cost.”

Ask Magic Johnson how he feels about that one. It goes on to talk about the cost of a failed relationship — about the heartaches and the loneliness and the sense of rejection that are the potential disasters that might result from letting yourself fall in love. I knew once in my practice an individual who had let themselves become so convinced that a relationship was necessary to their continued happiness and self-fulfillment that when it seemed to not work anymore to be disrupting or perhaps simply impractical, that I was told, “I won't ever let myself ‘love’ anyone again to the degree that I can be hurt this badly. I am going to protect myself in the future.” Now that to me is sad. Certainly falling in love, and without question, marriage, are about as risky as anything that this world provides. And yet, on the other hand, the fortunate among us having successfully engaged in those aspects of life have reaped rewards far beyond the human imagination.

“I'm Too Old To Die Young.”

They go on to talk about the death of a younger person deprived of the pleasures of watching the children grow up to be successful. But in a strange kind of way as I listened to that song it brought my thoughts to a close and profession-

ally valuable friend of mine who at the age of 62 underwent a heart transplant only a year or so ago. It was not a matter of the indications for the operation. They were clear, and he surely had a life limited to months unless it were done. It was a matter of age. He was too old chronologically for the heart transplant. He had to wait a while, in fact, until a properly available donor heart presented itself. I related the story recently in a social gathering to another friend of mine. The response was quick. “He took a heart that some younger person should have had.” Well, there surely are not enough healthy young hearts to supply the need. But here once again a piece of country music raises an ethical question that we in medicine struggle with.

“What In the World Am I Going To Do About You?”

I hear that song and every time our son, Bill, comes to mind. He was the one with what seemed to be an uncontrollable desire for mischief. It all started early when we had arrived at that happy point of parenthood when the school bus picked him up close to the house and precluded the need for us to drive him to school. It lasted a week until Bill set off the firecracker under the seat of the bus driver. We learned a lot about Bill during the next year driving him to school following receipt of the letter from the principal indicating that perhaps his conduct needed to be refined a bit before he could be accepted on the school bus route again.

But I also think of Rob when that plaintiff melody comes from the radio. He had firecracker mania, too, but at an early age not too much discretion. He thought he could blow up the neighbors mailbox with some firecrackers placed in one of the medicine bottles that he found around the house. The only

problem with that idea was that he used one of the bottles that had my father's name on it with my home address. And so we asked ourselves, the wife and I, quite a few times during those early years of rearing children, “What in the world am I going to do about you?”

“Without You What Will I Do With Me.”

Married, living together or simply interdependent friends, that question strikes at the heart of our personal security and dependence upon ourselves and upon others. We have all seen it particularly in the death of a spouse leaving the mate alone, lonesome, and devastated. We all need to think about that one a bit. It seems to me that it happens to physicians in particular.

We deal sometimes for years with patients who become an integral part of our sense of worth as human beings trying to alleviate suffering. And then that patient is no longer with us. Surely it happens with retirement as we suddenly find that a part of our lives that supported everything that was important to us — not just our finances but in particular our daily sense of being useful and valuable and important — has been taken from us.

“Baby's Got Her Blue Jeans On.”

Which goes along a little bit with one close to it in which they sing about “*The Lady In the Tight Blue Jeans*.” I can't help but think about sexual harrassment and Clarence Thomas. Whether he is guilty or not, I still can't decide. What I am convinced of, hopefully as a normally motivated male, is that some of the female dressing that one sees on occasion in certain environments is provocative, if indeed not truly inviting, to some type of sexual advancement. That is one thing which Jimmy Carter was totally honest about in that

Playboy interview years ago. He lusted, and I suspect that the lusting was a little stronger when he saw those tight blue jeans.

“I’m Going go Get a Wino to Decorate My House.” Now that one really gets to you. If I ever see a loyal wife, a devoted woman, then this has to be one. Her man had gotten into the habit of stopping by the local pub to spend a little time with the boys, arriving home later than was acceptable and in a state of physical impairment not exactly conducive to a quiet and gentle conversation before the fireplace. This lady is innovative, however. If it is the physical environment that attracts him, then she is going to fix that up at home. She is going to play some bar room music on the intercom and put up a red light that says “Exit” somewhere near the bathroom. She is going to make that house look so much like the local bar that he won’t have so far to walk or drive

when he gets through with his evening drinking. He will be at home, and he will be all hers.

“Further Along We’ll Know All About It — Further Along We’ll Understand Why.” Lord Almighty, I hope they are right about that one. The lyricist, of course, talks of the religious life. The implication is that when the Christian reaches heaven, all of the complexities, trials, and tribulations of this earthly life will be understood clearly and perhaps with some degree of forgiveness.

There was a time when I thought such about the practice of medicine. I mean not to imply that we find ourselves in heaven today. Far from that as RBRVS stares each of us in the eye with a cold and calculating look. We are of course “further along” and without reasonable question we certainly “know more about it.” We have come from a time when physicians enjoyed the adulation and esteem which the

public showered upon them and were reimbursed for their efforts with real and tangible payment — farm produce and cash — to a time when our ethical standing must be earned and proven and when our monetary return for our work is evermore a matter for other parties to decide. We have for our use medicinal agents and tools undreamt of in years past. We talk of “equal access” and of “quality” and of “affordability” in meaningful terms.

We physicians live and practice today in perhaps the most tumultuous era of change our profession has ever seen. We are smack in the middle of a medical care revolution. But we survived Medicare after 1964. We will surely survive RBRVS. We are without doubt “further along” the road to a better health care system and somewhere down the road we shall look back over these days and “know more about it.”

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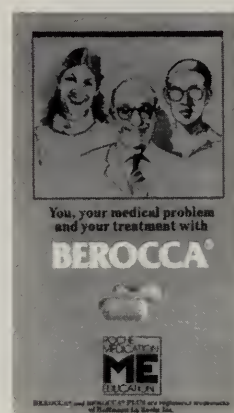
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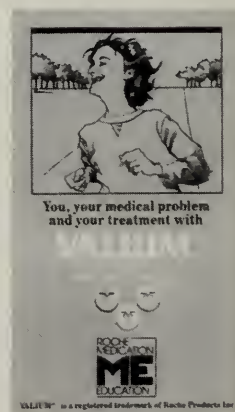
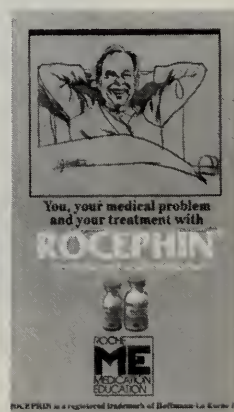
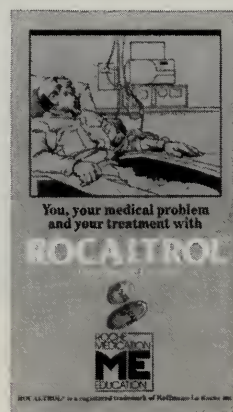
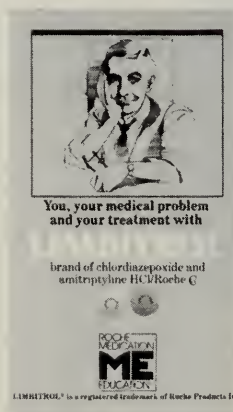
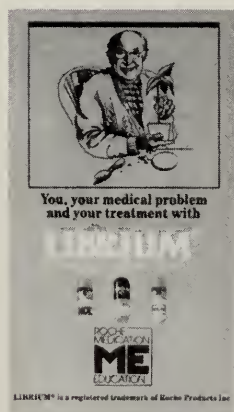
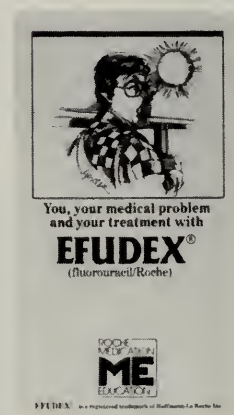
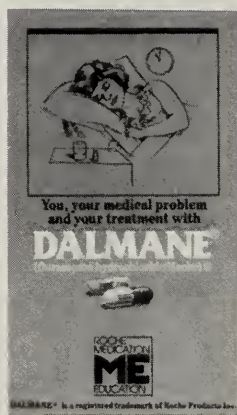


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Notice of Retraction

It has come to the attention of the Editor that the November, 1991, issue of the *Journal of the Medical Association of Georgia* dealing with Aesthetic Plastic Surgery contained an article entitled, "Correction of Ear Deformities," written by Mark Mitchell Jones, MD, which itself contained an omission of credit.

At least one of the case presentations included in this article with substantiating photographs has subsequently been identified as being the work of Burt Brent, MD, a plastic surgeon practicing in California who enjoys an international reputation in regards to reconstructive procedures of the ear.

Of the several case presentation in the article, at least this one (Figures 8A-C) implied by omission to be the work of Dr. Jones has been definitely identified as the work of Dr. Brent. The Editor of this *Journal* has satisfied himself that at least this one case is in fact that of a patient of Dr. Brent, that the entire surgical procedure was performed by Dr. Brent, that Dr. Jones failed to obtain the consent of Dr. Brent to include the case in the article submitted to this *Journal*, and that in the article, there is no indication of giving credit to Dr. Brent for having carried out this surgical procedure. The Editor of the *Journal of the MAG*, John R. Lewis, MD, who served as Guest Editor of this particular special issue, and the Editorial Board of the *Journal* deeply regret this occurrence and would like to extend to Dr. Brent our apology for the incident.

Charles R. Underwood, MD

MARCH 1992

23-24 — *Atlanta: Quantitative Thallium and Technetium Myocardial Spect.* Category 1 credit 13 hours. Ritz-Carlton, Buckhead, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

23-27 — *Atlanta: Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.* Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

25 — *Atlanta: Joseph S. Skobba Symposium.* Category TBD. Grady Hospital, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

26-28 — *Atlanta: Prevention of Prematurity and Neonatal Mortality.* Category 1 credit 15 hours. Westin Peachtree Plaza, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30022. PH: 404-727-5695.

27 — *Macon: Cherry Blossom Psychiatric Conference.* Category 1 credit and AAFP Prescribed credit. Contact Robert C. Fore, Ed.D., Mercer Univ. Sch. of Med., Office of CME, 777 Hemlock St., Macon 31201. PH: 912-744-1634.

27-28 — *Macon: Cherry Blossom Pediatric Conference.* Category 1 credit and AAFP Prescribed credit. Contact Robert C. Fore, Ed.D., Mercer Univ. Sch. of Med., Office of CME, 777 Hemlock St., Macon 31201. PH: 912-744-1634.

29-April 1 — *Atlanta: Demonstrations in Percutaneous Transluminal Coronary Angioplasty XXVI.* Category 1 credit 22 hours. Emory University Campus, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

APRIL 1992

1-3 — *Atlanta: MRN-92-01.* Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

2-4 — *Augusta: Functional Endoscopic Sinus Surgery.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

3-4 — *Atlanta: Frontiers in General Pediatrics.* Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

3-4 — *Atlanta: Recent Advances in Hepatobiliary Disorders.* Category 1 credit 10 hours. Ritz-Carlton, Buckhead. Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

6-10 — *Atlanta: Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.* Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

7 — *Atlanta: Office Ultrasound for the Gynecologist-Obstetrician.* Category 1 credit 8 hours. Atlanta Penta Hotel, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

20-24 — *Atlanta: Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.* Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

23-26 — *Atlanta: International Pain Symposium.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

23-25 — *Atlanta: Memory and Awareness in Anesthesia.* Category 1 credit 17 hours. Hotel Nikko, Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

23-25 — *Atlanta: Southeastern Society of Physical Medicine & Rehabilitation Annual Conference.* Category TBD. Hotel Nikko, Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

24 — *Macon: Day of Internal Medicine.* Category 1 credit and AAFP Prescribed credit. Contact Robert C. Fore, Ed.D., Mercer Univ. Sch. of Med., Office of CME, 777 Hemlock St., Macon 31201. PH: 912-744-1634.

25-26 — *Augusta: Pathology Symposium.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

26-30 — *Sea Island, GA: Eight Annual Masters in Gynecology.* Category 1 credit 12 hours. The Gloister, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., N.E., 30322. PH: 404-727-5695.

27-28 — *Atlanta: Quantitative Thallium and Technetium Myocardial Spect.* Category 1 credit 13 hours. Ritz-Carlton, Buckhead, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

27-2 May — *Augusta: 27th Annual Family Practice Symposium.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

MAY 1992

4-8 — *Atlanta: MR-92-02.* Category 1 credit. Contact Office of CME, Emory Univ. Sch. of Med., 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

LETTERS

Dear Editor,

I just finished reading your December, 1991, Editor's Corners, "Of Despair and of Joy." It was such a beautiful, touching, and moving piece of writing that I wanted to write and thank you for sharing your thoughts with the rest of us who are either too busy or too clumsy to compose such beautiful prose.

It is indeed a privilege to be a physician, participating in the most emotionally trying and vulnerable times of our patient's lives.

The government and third party payers and attorneys can lay siege to the practice of medicine but they can never rob us of the fundamental precept of the practice of medicine that makes it worthwhile. I thank you for reminding us through your editorials that this is so.

Sincerely,
John Duttonhaver, M.D.
Radiation Oncologist
Savannah

Dear Editor,

The cover on the January issue of the *Journal of the Medical Association of Georgia* is outstanding. This very graphically shows the present circumstances, as I see it in Georgia, regarding tort reform. A united effort on the part of medicine and large and small businesses will be needed to get this lady out of the

The present legislative session may be the time to accomplish this, and I am delighted to see MAG and MAG Mutual putting an all out effort to unite the various other interested parties, and proceed with this during the present legislative session.

Again, you are to be congratulated for another of our outstanding cover for our state journal.

Sincerely,
Roy W. Vandiver,
MD Neurosurgeon, Atlanta

THE UNITED STATES ARMY RESERVE HEALTH CARE PROFESSIONALS BONUS TEST PROGRAM

\$10,000 - \$20,000 - \$30,000

The **1989 National Defense Authorization Act** required that the Department of Defense conduct a test to determine the effectiveness of a recruitment bonus to attract health care professionals to the Selective Reserve of the Army. The 1991 National Defense Authorization Act directed that the test continue.

The Bonus Test Program is offered to physicians in the following specialties:

**ANESTHESIOLOGY
ORTHOPAEDIC SURGERY
and
GENERAL SURGERY**
(Including selected subspecialties)

Applicants must be board certified or meet all requirements for board candidacy in one of the above specialties.

BONUS ELIGIBILITY: In addition to meeting all criteria for appointment as a medical corps officer in the US Army Reserve, Bonus Test applicants must be civilians and if prior service, discharged before 28 April 1989.

BONUS AMOUNTS: The test offers \$10,000 bonus for each year of affiliation with the Selected Reserve of the Army, up to a maximum of 3 years. Physicians must choose 1, 2, or 3 years of affiliation at time of application. Bonuses will be paid annually at the beginning of each year of agreed affiliation.

TEST PARAMETERS: The design of the test stipulates that bonuses be offered in certain geographic areas. To qualify, applicants must reside within those areas at the time of accession.

**TO FULLY DETERMINE YOUR ELIGIBILITY FOR THIS PROGRAM
PLEASE CONTACT:**

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Building 710, First Floor, Fort Gillem, Forest Park, GA 30050
OR CALL COLLECT: (404) 362-3374 or 5646**

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The Medical Association of Georgia 1992 House of Delegates

Holiday Inn — Crown Plaza — Ravinia
Atlanta, Georgia
April 23-25

THE HOUSE of Delegates is MAG's legislative body, charged by our Constitution with the responsibility for transacting all business of the Association. Most importantly, the House determines MAG's positions on current issues facing the medical profession in Georgia.

All members of the Medical Association of Georgia are cordially invited to attend the sessions of our House and, with their elected Delegates and Alternate Delegates, participate in discussion of the issues under consideration.

THURSDAY, APRIL 23

4:00-7:00 p.m. Registration

7:00 p.m. General Session

Address of our annual guest speaker; MAG's Certificates of Appreciation presentations; Auxiliary to the Medical Association of Georgia President's report; and presentation of MAG's four special awards (Hardman Cup, Distinguished Service Award, Civic Endeavor Award, Family Physician of the Year, Charles R. Drew Award, and Milford B. Hatcher, MD, Resident Research Award).

8:00 p.m. House of Delegates (First Session)

Nomination of candidates for MAG offices, AMA delegates and alternates; announcement of Reference

Committees for Friday, introduction of resolutions; and other new business.

FRIDAY, APRIL 24

7:30 a.m. Registration

7:30 a.m. Georgia Medical Political Action Committee (GaMPAC) Breakfast

9:00 a.m. Reference Committee Hearings

Reference Committee A: Membership Services

Reference Committee B: Medical Practice & Delivery Systems

Reference Committee C: Legislation

Reference Committee D: Medical Education

Reference Committee F: Budget & Dues

Reference Committee C&B: Constitution & Bylaws

SATURDAY, APRIL 25

8:30 a.m. Registration

9:00 a.m. House of Delegates (Second Session)

Consideration of reports submitted by Reference Committees; Delegates' votes on resolutions and rec-

ommendations; election of nominated officers; and announcement of newly elected officers.

6:00 p.m. Installation Ceremony

Address of out-going president, Cyler D. Garner; installation of officers, and inaugural address of new president.

7:00 p.m. President's Reception and Dance

Honoring out-going presidents of the Medical Association of Georgia and the Auxiliary to the Medical Association of Georgia, Cyler D. Garner, MD, and Ingrid Brunt (Mrs. Gwynne).

SUNDAY, APRIL 26

9:00 a.m. House of Delegates (Third Session)

To be convened only if House, on Saturday, did not complete action upon all Reference Committee reports.

The April issue of MAG Newsletter will include a list of issues to be discussed at the upcoming House of Delegates meeting. All members are encouraged to become informed on these items, and express your views as to MAG's position regarding them.

Auxiliary to the Medical Association of Georgia 67th Annual Meeting



THURSDAY, APRIL 23

3:00 - 5:00 p.m. Registration

7:00 p.m. Opening Session, MAG House of Delegates

A-MAG President's Report
AMA-ERF Check Presentation

FRIDAY, APRIL 24

7:30 a.m. GaMPAC Breakfast

9:00-5:00 p.m. Registration

10:00 a.m. Pre-Convention Executive Board Meeting

11:30 a.m. Auxiliary Luncheon, Special Entertainment

1:30 p.m. Opening Session A-MAG House of Delegates

Greeting from MAG President

Presentation of Georgia Land,

A-MAG Cookbook

Spotlighting County Presidents

6:00 - 8:00 p.m. MAG/A-MAG AMA-ERF Auction

SATURDAY, APRIL 25

8:30 A.M. - 12:00 P.M. Registration

9:00 A.M. Second General Session, A-MAG House of Delegates

Introduction of Past State Presidents

Mrs. William B. Shelton, Jr., President, SMA-A

Memorial Service

Awards

Election and Installation of Officers

Inaugural Address, Mrs. William R. Hardcastle

12:30 President's Luncheon

Post Convention Board Meeting
(All Auxilians invited)

6:00 p.m. Installation of 1992 MAG President

7:00-10:30 p.m. Presidents' Reception

Honoring Cyler D. Camer, MD, and
Mrs. Gwynne T. Brunt, Jr. (Ingrid)



NEW INDICATION

ONLY ONE H₂-ANTAGONIST HEALS REFLUX ESOPHAGITIS AT DUODENAL ULCER DOSAGE. ONLY ONE.

Of all the H₂-receptor antagonists, only Axid heals and relieves reflux esophagitis at its standard duodenal ulcer dosage.

Axid, **150** mg b.i.d., relieves heartburn in **86%** of patients after one day and **93%** after one week.¹

AXID[®]

nizatidine

150 mg b.i.d.

ACID TESTED. PATIENT PROVEN.

AXID®

nizatidine capsules

Brief Summary. Consult the package insert for complete prescribing information.

Indications and Usage: 1. *Active duodenal ulcer*—for up to 8 weeks of treatment at a dosage of 300 mg h.s. or 150 mg b.i.d. Most patients heal within 4 weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a dosage of 150 mg h.s. at bedtime. The consequences of therapy with Axid for longer than 1 year are not known.

3. *Gastroesophageal reflux disease (GERD)*—for up to 12 weeks of treatment of endoscopically diagnosed esophagitis, including erosive and ulcerative esophagitis, and associated heartburn at a dosage of 150 mg b.i.d.

Contraindication: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H₂-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H₂-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix® may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chloridazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method.

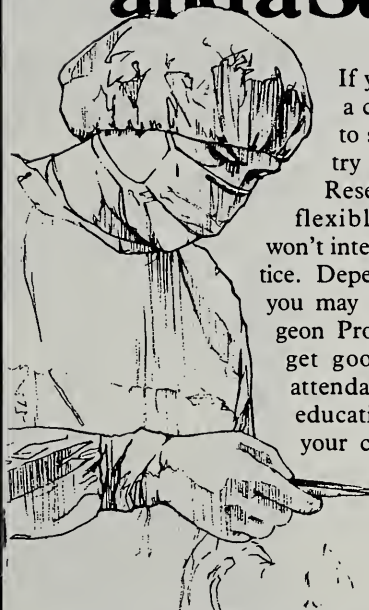
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Additional information available to the profession on request.



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Herbert Spencer

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The High Museum of Art at Georgia-Pacific Center

Art and Medicine:

Images of Healing from the 16th to the 19th Century

April 16-July 24, 1992



The Reward of Cruelty, 1751, woodcut by John Bell after William Hogarth.

To honor the 100th anniversary of Grady Memorial Hospital, the High Museum of Art at Georgia-Pacific Center will present an overview of the depiction of Western medicine from the 16th to the 19th century. Among the 100 Old Master prints to be exhibited will be 29 rare engravings, woodcuts, etchings and lithographs on loan from the Clements C. Fry Collection of *ars medica* at the Harvard Cushing/John Hay Whitney Medical Library of Yale University. Other important collections represented include the National Library of Medicine, the Philadelphia Museum of Art, the New York Public Library, the Metropolitan Museum of Art and the Library of Congress.

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The Forging of the Renaissance Physician: A Philosophic and Historic Perspective

Part I: The Influence of Hippocrates, Galen, and Islamic Physicians

Miguel A. Faria, Jr., MD

*A science which hesitates to forget
its founder is lost.*

ALFRED NORTH WHITEHEAD

*It is very seldom that the same man
knows much of science and about
the things that were known before
science came.*

LORD DUNSANY

Prologue

I WAS INSPIRED to write this article on medical history after reading the exhortations by Dr. Louis Sullivan, U.S. Secretary of Health and Human Services, and Dr. William Collins, a past MAG president, to develop some of the inherent qualities of the "Renaissance physician."^{1,2,3}

I began my quest by researching old books and journals and reviewing the work of the ancient physicians, Hippocrates and Galen. It soon became evident that the impact of the changes that were effected by the Renaissance on the course of medical history required an understanding of the medical and philosophic concepts that had led up to that time. That is, it was

In his Hippocratic Collection composed of 60 books, the Father of Medicine discusses the etiology of diseases, signs and symptoms of illnesses, and clinical observation of pathologic processes.

necessary to understand the *Zeitgeist* of medicine preceding the Renaissance before one could understand the revolutionary changes that had indeed occurred.

The quest thus evolved to a review of the medical history, philosophy, and many other social factors that led to the explosion of knowledge, artistic and scientific, which characterizes the Renaissance. Consequently, what began as a per-

functory review ended up as a more lengthy treatise of pre-Renaissance philosophy and medical history and an essential part of this four-part medical saga. It is written for the benefit of the readers of this journal with the hope that it will inspire them toward their own introspective search for the salient aspects of the "Renaissance physician."

Hippocrates and the Four Humours

Hippocrates of Cos (460-370 B.C.), the "Father of Medicine," is credited not only with the code of medical ethics but also with the concept of combining judgment and experience in medical practice. According to Greek legend, he was a descendant of Aesclepius, the God of Medicine, and Hercules, the mythologic hero.

In his collection of writings, which have been assembled in his *Hippocratic Collection* composed of 60 books, Hippocrates describes the etiology of diseases, signs and symptoms of illnesses, and clinical observation of pathologic processes.^{4,5} He also discusses the Hu-

Dr. Faria practices neurosurgery, is Clinical Associate Professor of Surgery (Neurosurgery), Mercer University School of Medicine, and past Chief of Staff, HCA Coliseum Medical Centers, Macon. Send reprint requests to him at 310 Hospital Dr., Suite 315, Macon, GA 31210.

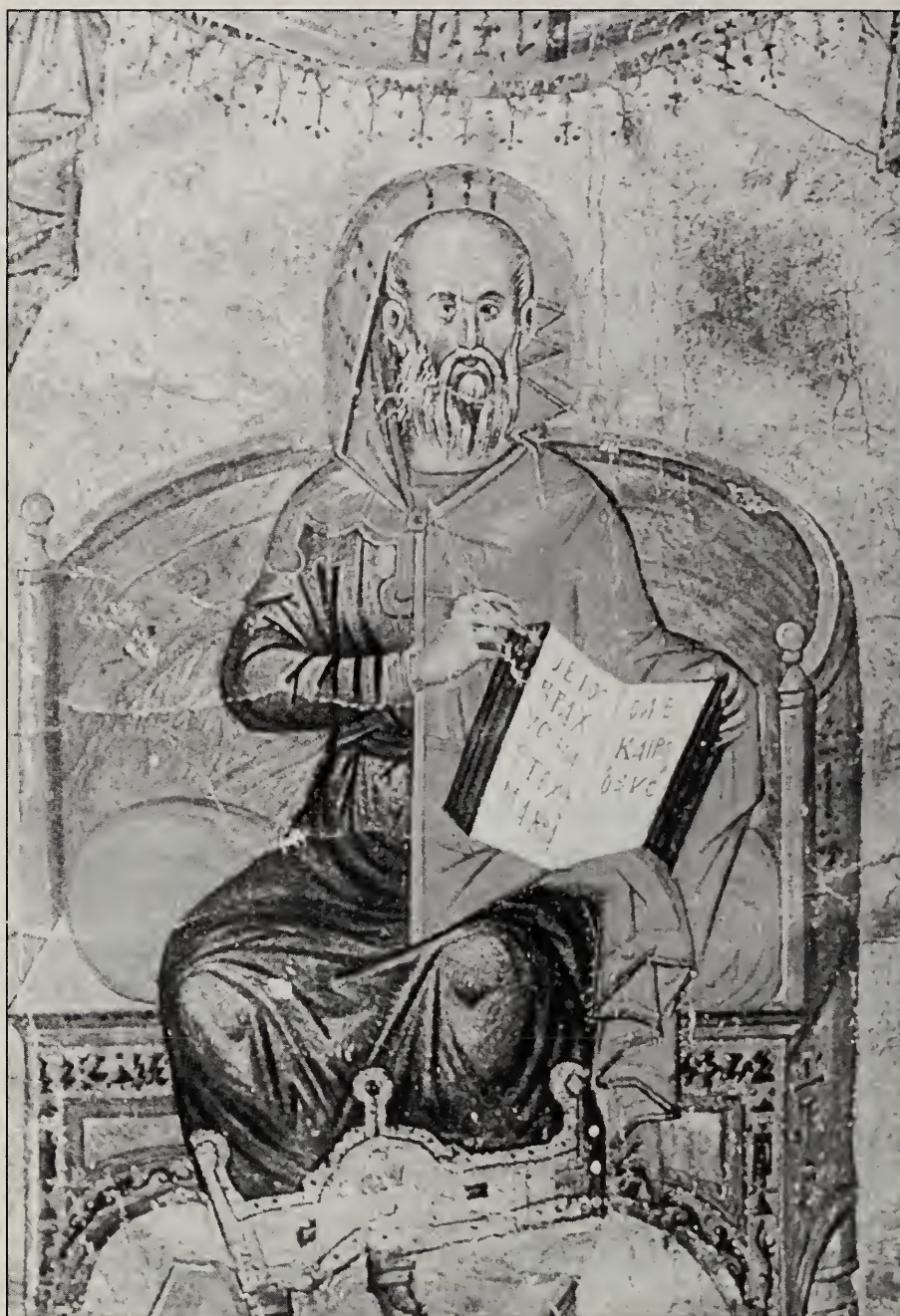


Figure 1. Hippocrates as envisioned by the Byzantines. From *Bibliothèque Nationale, Paris*.¹⁰

moural Theory of diseases, in which he contended that the body was made of Four Elements: blood, phlegm, black bile, and yellow bile. These elements allegedly caused disease when their normal mixtures and arrangements became unbalanced. This imbalance in disease states, for example, resulted in fever. He also stressed the impor-

tance of the examination of body secretions and fluids. He recognized immobility as a prognostic indicator of the severity of the disease. And he paid considerable attention to the symptoms described by the patient and the physical signs obtained from the physical examination.

According to Hippocrates, na-

ture had medicative and healing powers. A good physician, therefore, assisted nature in restoring health. Hippocrates was a proponent of the Critical Day Doctrine, which maintained that on certain numerically assigned days from the onset of an illness, the role of the physician was supportive only. But Hippocratic theory went further: it contended that the introduction of a morbid agent into the human body also affected one or more humours, thus causing imbalance and disease. To expel this morbid agent from the body, the physician should treat throughout the "period of crisis," assisting nature when needed.

Hippocrates also proposed the doctrine of *Contraria-Contrariis-Curantur*.⁵ This states that a physician should do to the body the opposite of that which the disease itself causes. For example, apply cold to hot areas and dampness to dryness. Perhaps Hippocrates' second best principle (after his code of ethics) is the axiom that the human body has the inherent power to preserve and heal itself, as well as the power to combat disease and its effects.

Galen: Physician par Excellence

Another medical giant was Claudius Galenus (Galen; 130-200 A.D.). Galen's medical system was in effect with very little modifications for 1300 years. If Aristotle is considered "the Philosopher" of the Middle Ages, then Galen should be considered "the Physician" of the Empire. After studying in Alexandria, the hub of learning in his day, Galen returned to his home in Pergamus and eventually settled in Rome. At the age of 30, he mingled and gained favor among the patricians of the city.⁵

Favored by the fact that he was eclectic by nature, Galen led medicine back to the precepts of Hippocrates and away from the cults, sects, and political influences in which it had become enmeshed in

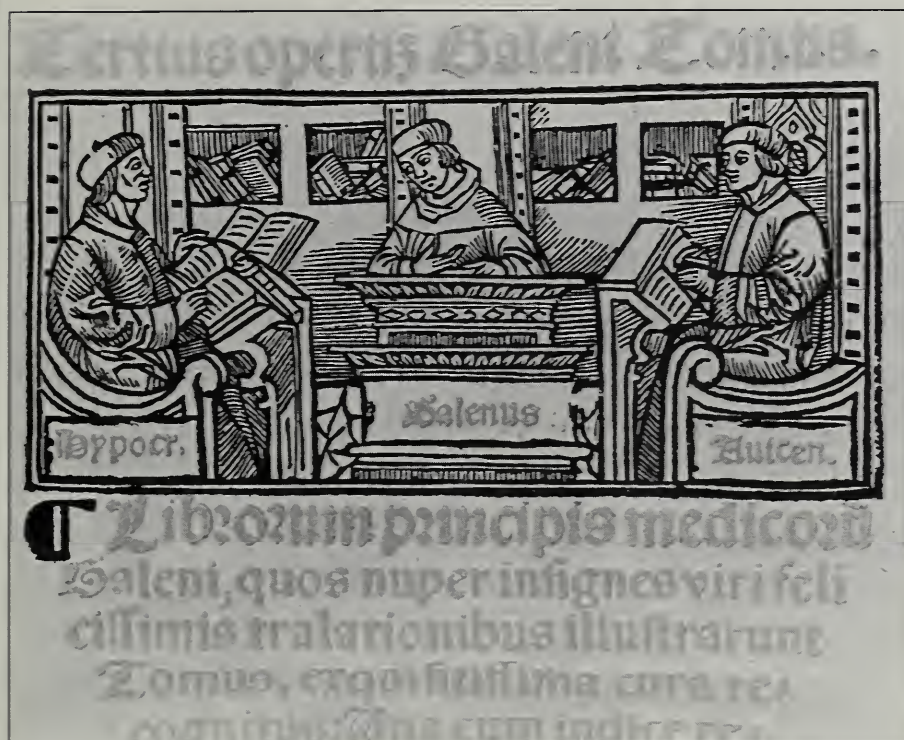


Figure 2. Hippocrates, Galen, and Avicenna. c. 1528. From the National Library of Medicine, Bethesda.¹⁰

the days of the Roman Empire. He practiced medicine during the reigns of Antoninus Pius, Marcus Aurelius, Commodus (Galen's office in Rome burned during the great conflagration of his reign), and Pertinax. He returned to Pergamus during the reign of Caracalla and died there in the reign of Septimius Severus.⁵

Galen followed the philosophy of Aristotle. He believed in Four Elements: fire, water, earth, and air. These were associated with Four Qualities: heat, moisture, dryness, and cold. He also subscribed to the Four Humoural Principles,⁶ with blood being the fluid par excellence. Each humour was associated with a Principal Quality, for example, blood is hot and moist. Lymph (phlegm in the Hippocratic tradition) is cold and moist. Yellow bile is hot and dry, and black bile is cold and dry. He also believed that the majority of diseases resulted from an excess, deficiency, or change within these four fundamental humours and their qualities.

Galen's anatomic knowledge is said to have surpassed that of Erasistratus or Herophilus, the two great anatomists and scholars of Alexandria during the First Century B.C.^{7,8} Roman law, however, did not allow dissections of the human body. Though Erasistratus and Herophilus were credited with performing the first systematic human dissections, after 150 B.C., human dissection was prohibited even in Alexandria, and the law was strictly enforced by Rome. Galen did have one occasion in which he had an opportunity to dissect a human body — the corpse of a robber that he found on a highway.⁹ For the rest of his anatomic works, he relied on animal dissections, primarily apes and pigs. Inevitably, anatomic errors occurred during the application of animal anatomy to human anatomy and physiology.

Like Hippocrates and Aristotle, Galen felt that preservation of health depended on the harmony of the Four Humours and their Four Qualities. Perfect health was associ-

ated with a perfect equilibrium of these humours. He went a step further and devised his Four Principles of Temperaments, namely the sanguine, the phlegmatic, the vilious, and the melancholic. These temperaments or "idiosyncrasies" supposedly predisposed individuals to specific conditions or diseases. Each disease required different treatment modalities: remedies were given to purify the humours, whereas purgatives were given to remove superfluous or vitiated humours. In addition, all the humours were subject to Plethora. General Plethora occurred when all the humours were in excess; Local Plethora occurred when there was excess of a single humour.⁵

Galen expanded further on symptoms of diseases, prognostic signs, and developed the concept of pathognomonic signs of diseases. He was a strong proponent of the examination of the pulse for diagnostic as well as prognostic purposes. He expanded on "the seat of the affection" concept, and like Hippocrates, stressed the importance of localization of diseases to the organs involved. The correlation of function and disease was also important. For example, micturition was a problem of the bladder, and abdominal distension, a problem of the bowels. In clinical practice, he upheld the Hippocratic doctrines of crisis and critical days

In his Hippocratic Collection composed of 60 books, the Father of Medicine discusses the etiology of diseases, signs and symptoms of illnesses, and clinical observation of pathologic processes.

and the axiom of *Contraria-Contrariis-Curantur*.⁵

In reviewing Galen's writing, most authorities agree that the majority of therapies formulated for specific diseases as well as the preservation of health are in line with Hippocratic therapeutics. Both he and Hippocrates stressed hygiene, diet, exercise, bathing, massage, moderation in eating and drinking, and the promotion of excretion.⁵ As a last resort, Galen resorted to blood letting. He was an advocate of blood letting in moderation and only after carefully considering all the indications and contraindications. For example, he bled in cases of Plethora, and the amount bled was always proportionate to the patient's constitution, temperament, and strength. He never bled children under age 15. It was also his opinion that it was better to err on the side of insufficient blood letting than on the side of excess.⁵ (The age of overzealous blood letting was yet to come in the 17th Century).

Galen prescribed theriaca and opium for sleeping, pain relief, diarrhea; otherwise he prescribed few internal medications. Theriaca has an interesting origin, and was used as a panacea for illnesses until the 18th Century. Finally, Galen was not only a prolific writer who left the most voluminous body of writing in antiquity, but he was also a trained observer of nature and a compiler of knowledge. "It was he who corrected the error of Praxagoras and Erasistratus — that the arteries contained air and hence their name on that account".⁷ By experimentation, Galen showed that the arteries contained blood and not air.

The Islamic and Middle-Eastern Tradition

From the 9th to the 14th century, Greek medicine other than Galenic medicine ceased to exist in clinical practice; fortunately, however, all knowledge was not lost. Monasteries became the repository of knowl-



Figure 3. Theriaca in preparation. In Galen's time, the number of ingredients exceeded 70. From the National Library of Medicine, Bethesda.¹⁰

edge during these so called Dark Ages. The Eastern Roman empire with its capital in Constantinople also became a preserver of Greek and Roman classics. Yet scholars of this period had little or no access to this knowledge. The Byzantine emperors were obliged to seek medical advice and sometimes treatment from Islamic physicians.

Autopsies and human dissections were prohibited through the Middle Ages in Islamic countries, and their scholars had to rely on Galen's anatomic works until the Renaissance. The Islamic countries nevertheless contributed to Western medicine by preserving and codifying Greek medical manuscripts which had been translated into Latin by Jewish physicians and into Arabic by Islamic physicians. Because of the contribution of Islamic physicians to Western medicine, this treatise would not be complete without mentioning

some of the outstanding Islamic physicians who influenced the course of Western medicine.

The greatest of them was Avicenna (Ibn SINA; 980-1037 B.C.). He was chief physician to the teaching hospital in Baghdad and court physician to the Caliphs. His magnum opus, *The Canon*, contains dissertations on all fields of medicine: meningoencephalitis, apoplexy, hemiplegia, paralysis, and a remarkable treatise on facial palsy which distinguishes, clinically and anatomically, between central and peripheral facial paralysis. Avicenna also described pyloric stenosis and gastric ulcers. He linked the etiology of hepatic disease to the harmful effects of alcohol. He also discussed jaundice and the differentiation of the clinical types, i.e., hemolytic vs infectious jaundice. He, as did Galen, recommended blood letting for ap-

oplexy in Plethoric subjects with the proper clinical history and "a full red congested face and eyes."⁵ Given today's hemodilution therapy for improving cerebral blood flow in patients with cerebral infarction, the claim is not too far off the mark.

Though Roman law prohibited dissection of the human body, Galen did have one occasion in which he had the opportunity to examine one — the corpse of a robber that he found on a highway.

Other celebrated Islamic physicians who were keen observers and clinicians and who left behind detailed clinical histories documenting their cases include Avenzoar (1094-1160 A.D.), Rhazes (died 923 A.D.), and Abulcasis (912-1013 A.D.).⁵ Avenzoar described pericarditis; Rhazes described the revolutionary idea that fever was merely a symptom of the body fighting illness rather than a disease process itself. Abulcasis was born near Cordoba which was at the time the seat of medical knowledge. He was credited with restoring surgery to its former glory in Islamic medicine during this period. His book on surgery was an illustrated compilation of surgical techniques. Abulcasis considered cautery, as did most Islamic physicians, an excellent method of treatment and gave spe-

cific indications for its use. He described tracheotomy performed transversely between the 3rd and 4th tracheal rings.⁵

Another discipline, Islamic pharmacology and therapeutics, was completely empirical. There were experiments with drugs in animals. Rhazes, for example, studied and discussed the effects of mercury in monkeys. Islamic physicians also studied botany and traveled abroad specifically to study new plants for medicinal purposes and enlarged the Islamic pharmacopoeia.

Moses Maimonides (1135-1204 A.D.) was a Jewish physician who also lived in Cordoba. Because of religious persecution, however, he fled to Fez where he was protected by the Sultan Saladin. Like Hippocrates, Maimonides composed a code of medical ethics, realized the importance of preventive medicine, and described the interrelationship between emotions and bodily functions.¹²

Averroes (1126-1198), a Spanish Moslem physician from Seville, published his *Colliget*, a compilation of all the knowledge of his time. "The Commentator," as he was frequently referred to by medieval thinkers, translated and reintroduced to the West the writings of Aristotle. He was, nevertheless, a controversial figure because of the pantheism and mysticism in which his philosophy (Averroism) was immersed. Averroism was deplored by many religious leaders and for centuries its followers were persecuted as heretics.^{5,13}

Islamic physicians are also credited with being the first to develop clinical teaching hospitals which were founded and administered in association with great medical

schools such as those in Baghdad, Cairo, and Cordoba. At the time those institutions of learning and medical practice were unsurpassed in the Western world. The library of Khalif el-Hakim II of Cordoba which was said to have contained more than 600,000 volumes.⁵ Islamic physicians were also the first to link the development of medical knowledge to charity medical care for the mutual benefit of students and the indigent population. It has been said that Islamic translations and the preservation of knowledge during this period were the greatest contributions of Islamic and Jewish scholars to Western culture, but the

Galen was not only a prolific writer who left the most voluminous body of writing in antiquity, he was also a trained observer of nature and a compiler of knowledge.

statement does not do them justice. As we have seen, they not only supplied Western scholars with material to translate and study, i.e., the works of Galen, Dioscorides, Hippocrates, Plato, and Aristotle from Arabic translations, but they were excellent physicians who in their own right contributed to our medical heritage in Western civilization. Islamic physicians kept the torch of medical knowledge burning at a time when the curtains of the Dark Ages had fallen on the stage of Europe.

Part II: The Philosophic Basis for Pre-Renaissance Medical Knowledge

Man is but a reed, the weakest thing in nature, but he is a reed that thinks.

BLAISE PASCAL

The Influences of Plato and Aristotle

ARISTOTLE (384-322 B.C.) was undoubtedly the most influential philosopher from antiquity to the Renaissance. The son of a physician at the court of King Philip II of Macedonia, Aristotle studied at The Academy under Plato (427-347 B.C.). Subsequently, he formed his own school, The Lyceum, in Athens. He was the teacher and tutor of Alexander the Great (356-326 B.C.) and through this association substantially influenced the course of history. Less well known is the fact that Aristotle exhorted Alexander's troops to practice good hygiene and sanitation, and to boil water before drinking it, and to bury their dung.¹

Aristotle mastered logic, philosophy, biology, political thinking, and ethics.² During the Middle Ages, he was simply referred to as The Philosopher. As a student of nature, Aristotle was more interested in facts than in ideas. He wanted to know things as they were, not as they should be. For learning, he espoused the Hippocratic method of systematic observations of nature and formulated an extensive classification of organisms using this approach. He counseled the "Golden Mean: virtue is moderation, the mean between opposite vices." The ethical code of Aristotle was not the lofty Socratic goal of Self-Knowledge or the Platonic Idea of Good but the cultivation of moderation.

Plato, on the other hand, proclaimed that the highest virtue of

The ethical code of Aristotle was not the lofty Socratic goal of Self-knowledge or the Platonic Idea of Good but the cultivation of moderation.

man is the Idea of Good.³ Plato proposed the doctrine of ideas which, according to him, led to undisputable Truths. The neo-Platonic school of thought, which reappeared at the time of the Renaissance and thereafter to challenge Aristotelian philosophy, asserted the principles of the doctrine of Idea of Good by mystical experiences.

St. Thomas Aquinas: The Philosophic Transition to the Renaissance

St. Thomas Aquinas (1225-1274 A.D.) was the greatest of medieval theologians. A Dominican Friar, he was the most erudite scholar and prodigious writer of his Age. In the controversy between the Realists and the Nominalists which raged in the Middle Ages, he was a moderate Realist who used orderly logic and common sense.⁴ He reconciled the conflict between the medieval Nominalist and Realists using a teleologic approach. Similarly, he reconciled the teachings of Aristotle to the medieval Christian faith.

St. Augustine (354-430 A.D.) had already welded together Christian scriptures to neo-Platonic thought in the Dark Ages⁵ and had paved the way for the Christianization of the then crumbling Roman empire. St. Thomas Aquinas was careful to site the Scriptures and St. Augustine

in his monumental works, *Summa Theologica* and *Summa Contra Gentiles*.⁶ These works were encyclopedias of medieval learning, thought, philosophy, and logic, all scholarly compiled. He believed that through Faith, Truths are directly revealed from God. When thinking is rightly and rigorously pursued, it merely confirms the Truths revealed by Faith. Therefore, if Man arrives at a different conclusion from that of Christian orthodoxy, he must have used faulty logic. This teleologic concept of logic influenced Christian thought through the late Middle Ages to the present age.

St. Thomas Aquinas also forged the concept of the human body made up of a spiritual mind and a material body. The spiritual principle was an emanation from God, a ray of divine intelligence. Though he adapted Aristotelian philosophy to Christian dogma, he was careful to distinguish Faith from Reason, not making one exclusive of the other.

John Duns Scotus (1265-1308), a Scottish Franciscan theophilosopher, rejected the Aquinas doctrine, asserting that Faith was irreconcilable from Reason. He believed that Will, not Reason or Faith, was the ruling principle. In time, his theology led to a schism in Catholic dogma⁷ and indirectly influenced the events leading to the Renaissance.

St. Thomas Aquinas' scholasticism reconciled Faith and Reason and explained observed natural phenomena. Scholasticism thus taught that observed natural phenomena could be explicated by known or assumed Truths. The accommodation of the theory of The

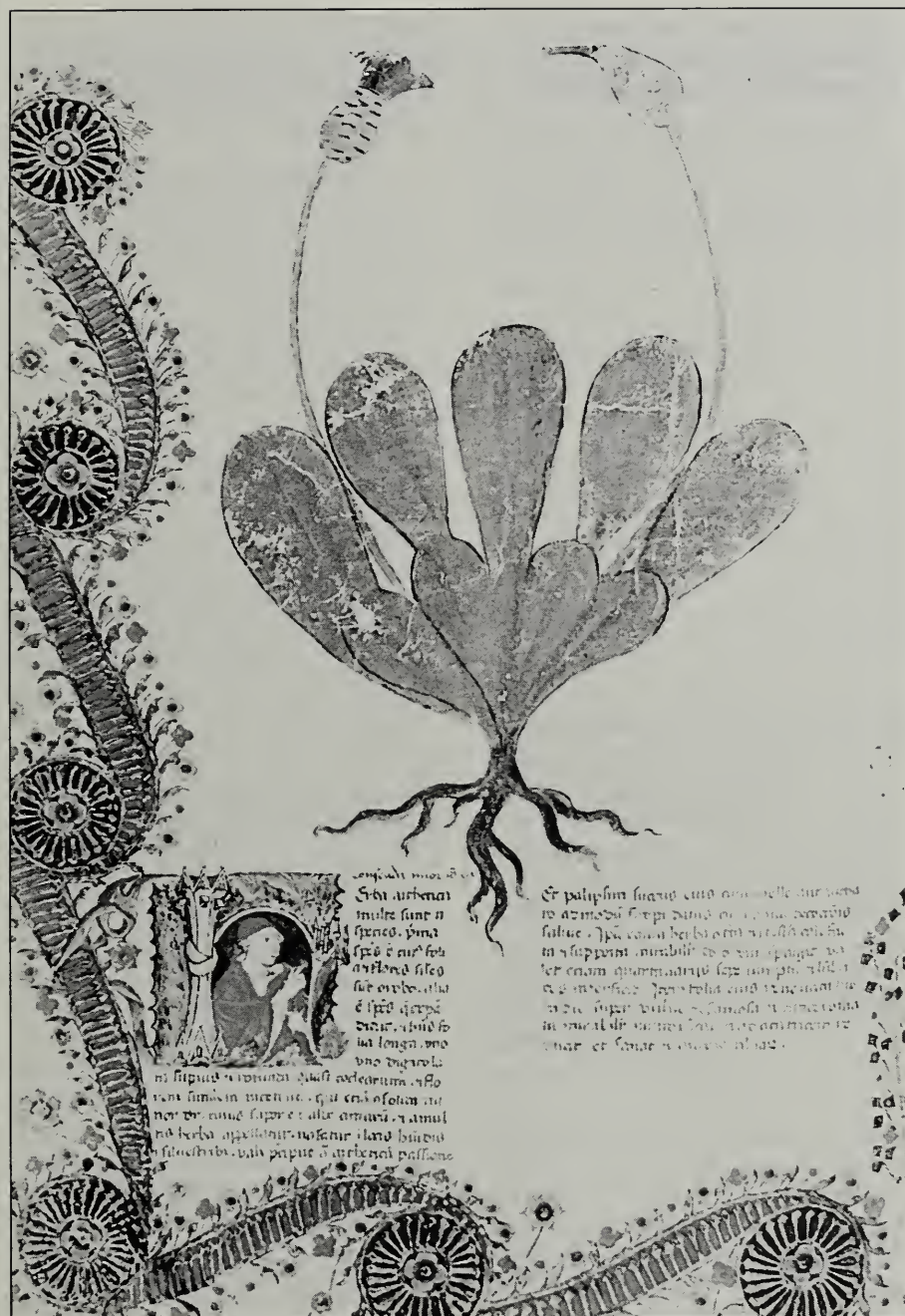


Figure 1 — Medieval botanical illustrations in the Middle Ages often had a more mythologic or decorative value than an informative function in the actual study of plants in nature. From the Biblioteca Casanatense, Rome.⁸

Four Humours within Christian theology and the reconciliation of Faith and Reason provided needed stability during the Middle Ages. St. Thomas Aquinas' scholasticism was the natural philosophy of the Middle Ages and thus it provided a relatively smooth transition to the Renaissance.

The Revolt of the Renaissance

During the Renaissance, scholasticism was challenged and demoted, whereas the study of nature and observable events assumed an importance unknown before. The rediscovery of the classics did not negate the need for experimentation. Even ancient authorities were

subject to verification and confirmation for the truths of their works. Though the old masters, i.e., Aristotle, Dioscorides, Galen, and Avicenna, were revered, their works were for the first time subject to scrutiny by Renaissance scholars.⁸

During the Renaissance, nature assumed an importance it never had before. There was a great interest in the study of the Graeco-Roman classics, but even these works were subject to direct observation, experimentation, and study by Renaissance scholars.⁸ The Renaissance also challenged the scholastic doctrine of Final Cause which required that known observations be consistent with known Truths. Observations and experimentation, rather than philosophic studies and preconceptions, led the way for progress. For example, the manuscript tradition of the Middle Ages for the most part did not rely on natural observations but on earlier illustrations and descriptions that were accepted as Truth. They were copied and recopied over the centuries. Inevitably, errors occurred in the translations that hindered knowledge and progress. In the study of botany, for instance, the medical pharmacopeia was based on previous descriptions and preconceived assumptions rather than on the actual study of plants in nature.⁸ Botanical illustrations represented mythology or had more of a decorative than an informative function. Point of fact is *Dioscorides' De Materia Medica*.

Pedacious Dioscorides (40-90 A.D.) was a surgeon in Nero's army, c. 60 A.D. He wrote the *De Materia Medica*, the standard illustrated reference which was to hold a grip on botanical medical illustration for 15 centuries. It is ironic that both Dioscorides and Galen's followers accepted what the masters wrote and described as facts rather than follow their teachers' principles and methods of learning.

Dioscorides' book is a beautifully

illustrated encyclopedia describing 519 species of plants and their uses. This monumental work should have stimulated others to do their own investigations in nature rather than to copy his work. But tradition dictated that scholars work in poorly lit scripture rooms, in their own homes, or in monasteries. Dioscorides' book was recopied many times during the Middle Ages, rendering the illustrations useless for botanical studies. During the Renaissance, artists began

During the Renaissance, though the old masters (Aristotle, Dioscorides, Galen, and Avicenna) were revered, their works were for the first time subject to scrutiny by scholars.

to make their own observations rather than rely on previous descriptions and botanical precedent.

The Renaissance also saw Man as being preoccupied with this world and not the Hereafter alone. This period in history witnessed the ascendancy of neo-Platonism, Hippocratic teaching, observation of natural phenomenon, and the decline or fall of Aristotelian philosophy, Galenism, and scholasticism.

Human dissection was reintroduced in the Western world during the Renaissance.⁹ Though autopsies had occasionally been permitted in the Middle Ages, they were now sanctioned by the Church and were used widely to teach anatomy in the major universities. This brought an unquenchable thirst for anatomic dissection and experimentation which was essential for the burgeoning disciplines of anatomy, pathology, and physiology.

Francis Bacon: Spokesman for Inductive Reasoning and Scientific Experimentation

During the Renaissance, Francis Bacon (1561-1626), the English lawyer, humanist, philosopher, and Lord Chancellor spoke on behalf of the new learning. Bacon was an ardent and eloquent spokesman for the inductive method of reasoning and scientific experimentation. He promoted the concept of observation and the collection of simple facts, without the formulation of a preconceived hypothesis, prior to the formulation of a general theory of knowledge. He called for scientific experimentation in his book *Novum Organum*.¹⁰ He opposed the theology and philosophic concepts of St. Thomas Aquinas. In effect, he revived the philosophy of his namesake, Roger Bacon (1214-1294), the Oxford Franciscan who had unsuccessfully called for scientific experimentation almost 300 years earlier.

Francis Bacon advised scientists to pursue natural science to arrive at the Truth. His approach was laboring experimentation, inductive reasoning, observation, and generalizations, though he himself was said to have been a poor scientist.¹²

It was the relatively sudden upheaval in learning and creative thinking that lit the fire of the Renaissance and paved the way for the great scholars, especially physicians, who would burn new paths toward the advancement of medical knowledge: Vesalius, Paré, Paracelsus, and others whom we will meet in Parts III and IV of our continuing saga of the Medical Renaissance.

Acknowledgments

The author is indebted to The History of Medicine by Dr. C.G. Cumston for much of the information on Hippocrates, Galen, and the Islamic physicians. My thanks go to the National Library of Medicine, Bethesda, and to the publishers of the magnificent book, *Medicine: An Illustrated History* by Lyons and Pe-

trucelli to whom I am also indebted for the illustrations in this article.

This work is dedicated to Helen, Miguelito, and Elenita.

References — Part I

1. Sullivan L. Global health care: a look at the future. *J Med Assoc Ga* 1990;79:901-904.
2. Sullivan L. Commencement address. Mercer University School of Medicine. The Macon Telegraph, June 3, 1991.
3. Collins W. In search of the Renaissance physician. *J Med Assoc Ga* 1991;80:187-188.
4. Hippocrates. *The Genuine Works of Hippocrates*. Francis Adams (trans). London: Sydenham Society, 1849.
5. Cumston CG. *The History of Medicine*. New York, Dorset Press (1st ed. 1926), 1987.
6. Galen. *Galen's Pergamene Omnia quae Extant, in Latinum Sermonem Conversa*: In, Gesner C, ed. Basel: Frobenius, 1561-1562.
7. Osler W. The evolution of modern medicine — Galen's written works. Lecture delivered at Yale University on The Silliman Foundation, April 1913. New Haven, Connecticut. Yale University Press, 1921. Reproduced in *JAMA* 1988;260:3182.
8. Haeger K. *The Illustrated History of Surgery*. Leuven JV (ed and trans) New York, Bell Publishing Co, 1988.
9. Newman A. *The Illustrated Treasury of Medical Curiosa*. New York, McGraw-Hill Book Co, 1988.
10. Lyons AS, Petrucelli RJ. *Medicine: An Illustrated History*. Rawls W (ed), New York, Harry Abrams, Inc, 1978.
11. Harvey D, Fehrenbacher DE. *The Illustrated Biographical Dictionary*. New York, Dorset Press (3rd Ed.) 1990.
12. Spector B. One hour of medical history. Selected excerpts. *Surg Neur* 1990;33:64-73.
13. Accardo P. Dante and the circle of malpractice. *South Med J* 1989;82:624-628.

References — Part II

1. Prindle RF. Disinfection — Yesterday and Today. *Res Staff Phys* 1977;100:1s-11s.
2. Aristotle: *On Man In The Universe*. LR Loomis (ed). Roslyn, New York, Walter J Black, Inc, 1943.
3. Plato: *Five Great Dialogues*. B Jowett (trans) and LR Loomis (ed). Roslyn, New York, Walter J Black, Inc, 1941.
4. Cumston CG. *The History of Medicine*. New York, Dorset Press (1st Ed, 1926), 1987.
5. Pilkington JG (trans). *The Confessions of St. Augustine*. New York, The Heritage Press, 1963.
6. Gilby T. *Saint Thomas Aquinas Philosophical Texts*. New York, Oxford Univ Press, 1960.
7. Harvey D, Fehrenbacher DE (ed). *The Illustrated Biographical Dictionary*. New York, Dorset Press (3rd Ed), 1990.
8. Lyons AS, Petrucelli RJ. *Medicine: An Illustrated History*. Rawls W (ed), New York, Harry N Abrams, Inc, 1978.
9. Haeger K. *The Illustrated History of Surgery*. JV Leuven (ed and trans), New York, Bell Publishing Co, 1st Ed, 1988.
10. Bacon F. *Novum Organum*. Devey J (ed). New York, American Home Library, 1902.
11. Bloch H. Francois Magendie, Claude Bernard and the interrelation of science, history, and philosophy. *South Med J* 1989;82:1259-1261.
12. Brinton C, Christopher JB, Wolff RL. *A History of Civilization*. New Jersey, Prentice Hall, Inc, 3rd Ed, 1976.

Crawford W. Long in His Medical Setting

James Harvey Young, PhD¹

CRAWFORD WILLIAMSON Long was born in 1815 in the village of Danielsville, Georgia.² His birthplace still stands, although in a state of disrepair (Figure 1). His family moved soon thereafter a few miles westward to another village, Jefferson, where his father prospered, becoming a plantation owner, miller, owner of railroad stock, clerk of court, and state senator. A believer in education, the senior Long established an academy that his son attended. Through the father's friendship with the president of Franklin College in nearby Athens, which later became the University of Georgia, Crawford gained admittance when younger than the required age.

Family and university tradition hold that Crawford Long and Alexander H. Stephens, later vice-president of the Confederacy and governor of Georgia, roomed together. The Old College building still stands and bears a tablet designating the Long-Stephens room. Long graduated in 1835, third in his class, in the same year that Stephens received his master's degree.³

The two men remained close

An account of the events and times surrounding Long's first use of ether, with some speculation to explain his delay in publishing his findings.

friends throughout Long's life, and, after his death, Stephens recommended that Georgia place statues of Long (Figure 2) and Georgia's founder, James Oglethorpe, in the Hall of Fame of the nation's Capitol. In fact, that honor eventually went to Long and Stephens.⁴

Another amusing link between the two men turned up in an advertisement for the drugstore Long operated in Athens during the last 28 years of his life. It was a testimonial by Stephens praising the efficacy of Globe Flower Cough Syrup that Long vended.⁵ Stephens was an inveterate taker of patent medicines. Lawyer Stephens, so it happened, on Long's venturesome surgical day, was briefly at his home in Crawfordsville while making the

spring circuit of the Georgia courts.⁶

After graduating from college, Long returned to Jefferson, ran the academy for a year, and read medicine with a local doctor. He then rode his horse from Georgia to Kentucky to attend medical school at Transylvania. In 1838, Long transferred to the Medical School of the University of Pennsylvania, receiving his M.D. degree the next year. He then spent a year and a half "walking the hospitals" in New York City. He specialized in surgery, gained a reputation for his skill, and received the advice that this ability might provide him a useful career in the Navy. Long, however, rejected this opportunity and, yielding to his father's entreaties, came home to Jefferson, where he bought out the practice of his earlier preceptor. The year was 1841.

Jefferson at that date could still be regarded as on the frontier. Atlanta had not yet appeared on the map. Three years earlier, a short distance to the west of Jefferson, the Cherokee Indians had been forcibly removed from their territory and sent westward along the Trail of Tears. It was in this setting



Figure 1. Crawford W. Long's birthplace in Danielsville, Georgia.

that Crawford Long, possessed of as thorough training as the United States could provide a physician at that time, began the arduous life of a country practitioner.

Most American physicians at this time had received a much more meager training than had Long. A European visitor in the year that Long began his practice in Jefferson asserted that doctors in rural America, that is, 90% of the nation, were woefully behind the advanced countries of Europe in medical knowledge.⁷ European medical students spent as much time studying anatomy alone as most American students spent on their entire medical education.⁸ The American Medical Association was not founded until 1847, in part to assess the quality of medical education. The fledgling AMA quickly concluded that, of all the professions, physicians were the most poorly trained.⁹ Historians today concur with such contemporary judgments. The noted chronicler of American medical history, John Duffy, speaks of the 1840s as a "low point" in the history of the Ameri-

can medical profession.¹⁰

Criticism from at home and abroad was only one factor contributing to a precipitous decline in public esteem which the medical profession was suffering. Individual physicians might maintain a lofty local reputation, but doctors as a group were under siege.^{11,12} The anti-intellectual tenor associated with Jacksonian democracy, disparaging all learned professions, played its role in this. The vociferous rise of sectarians — Thomsonians, homeopaths, hydropaths — put orthodox physicians on the defensive. The feuding and backbiting in which many regular doctors engaged did not endear them to or bolster the confidence of the public. The laity believed, reported a Louisiana State Medical Society committee gloomily, "that . . . it is quite as easy to cultivate cabbage as science."¹³ Nor was the profession receptive to new ideas. Oliver Wendell Holmes's 1843 essay on the contagiousness of puerperal fever fell on deaf ears.¹⁴

Surgeons, it is interesting to note, had a higher reputation than did

the medical profession generally.¹⁵ To be sure, surgical specialization had scarcely begun. The 1850 census had separate categories in New York state for physicians and surgeons, and the latter class was numerically small. Even those called surgeons were not truly specialists, but emphasized surgery within a general practice. Throughout most of the nation, as in Jefferson, Georgia, surgery and medicine went hand in hand. In retrospect, this era of surgery could appear both unventuresome and barbarous. Some elderly physicians, reminiscing in 1897 about surgery prior to anesthesia, could compare it with what they had heard about the tortures of the Spanish Inquisition.¹⁶

Yet, as calculated at the time, surgery seemed promising and won much respect from an awed public. The Englishman Robert Dunglison, whom Thomas Jefferson had brought to the University of Virginia, spoke to the students in 1840 about "the present improved condition of surgery." He cited better instruments and a more daring spirit that had brought many advances, including the ligation of large arteries in the case of aneurysm.¹⁷ Surgery's mechanical process, one commentator reasoned, appealed "directly and forcibly to the senses of the unskilled" layman. The practical American could comprehend it, and the drama of the surgical amphitheater gripped his imagination.

Such was the surgical setting when Dr. Long returned to Jefferson. Late in 1841, the young men of the town learned of the amazing antics brought on by nitrous oxide administered to volunteers by an itinerant showman, one of a host of such performers who had been crisscrossing America for some time.¹⁸ Some of his friends besought Long to make some of the wonder gas for their own private use. Long had no apparatus with which to prepare and preserve nitrous oxide. He did, however, have some sul-



Figure 2. Long's statue in the Capitol Building, Washington, DC. A replica of this statue is also located in Danielsville.

phuric ether which, he said, "would produce equally exhilarating [sic] effects." While in Philadelphia he had seen a showman use ether, after which Long and other medical students had locked themselves in a room at their boarding house and enjoyed a private ether jag.¹⁹

Hearing this testimonial, Long's

companions were all the more anxious "to witness its effects."²⁰ Long first gave ether to a member of the group who also had inhaled it on a previous occasion. He took some himself and gave some to all the other young men present. "They were so much pleased. . .," Long wrote, "that they afterwards inhaled . . . [ether] frequently, and in-

duced others to do so, and its inhalation soon became quite fashionable in this county, and in fact extended from this place through several counties in this part of Georgia." Nor did observing the ether sniffing remain a male prerogative. Word leaked out to the Jefferson maidens. Preparations were made to admit them to one of the revels in Dr. Long's office. In February, 1842, Long wrote to a former member of the Jefferson circle who had moved to Athens and asked him to have some ether sent post-haste.²¹ "We have some *girls* in Jefferson," Long explained, "who are anxious to see it taken and you know nothing would afford me more pleasure than to take it in their presence & get a few sweet kisses." The event itself turned out to be almost sedate. Warning the girls that they must not hold him responsible for any effects the ether might have, Long sniffed the moistened towel, then walked solemnly around the room and kissed each girl in turn.²²

Contrary to what some writers have asserted, probably not included among the girls was Caroline Swain, 10 years Long's junior whom he would wed some 6 months later. Two years earlier, Crawford had first seen Caroline, a vivacious and golden-haired beauty of 14, skipping rope.²³ Now she was 16, deemed of marriageable age by the standards of the time, and Long launched his courtship. But Caroline was out of town, and for the time being the courtship had to be epistolary. This sprightly exchange of letters still exists.²⁴

Intriguingly, this crucial period in Long's personal life and the crucial period in his professional life almost exactly coincide, the noteworthy date of March 30, 1842, falling in the middle of the correspondence. But Long neither alludes to what he might be contemplating nor later refers to what he had done. This poses a puzzle. Might there not have been, even in

a love letter, one proud "eureka"? Does his absence of comment suggest that Long, who did not keep the events of March 30 a secret, failed at first to regard his innovation as of momentous potential for surgery? Years later, in her diary, Caroline recalled Crawford at about this time as, "dressed in a light blue summer suit, collar and cuffs black, tan colored silk gloves, wide brimmed white hat, sitting superbly on his dapple grey charger, firm [and] dignified."²⁵

During the ether frolics, one of the young men injured his ankle joint while stumbling around and was disabled for several days afterward.²⁶ Yet, he told Long, he had felt not the slightest pain at the time until the effects of the ether wore off. Long observed the same phenomenon in himself and others and concluded that surgical operations might be performed without pain.

This led him to suggest to one of his friends, James Venable, that an experiment be made. Venable had consulted Long several times about removing two tumors from the back of his neck, but had demurred from the operation "from dread of pain."²⁷ Long's proposal for Venable to inhale ether while Long removed one tumor persuaded Venable. In the presence of witnesses, the operation took place in Long's office that very evening.

When Long finally reported, 7 years later, on his pioneering venture, he might have been more explicit about exactly what took place. Here is what he wrote: "The ether was given to Mr. Venable on a towel; and when fully under its influence I extirpated the tumor. It was encysted, and about half an inch in diameter. The patient continued to inhale ether during the operation, and when informed it was over, seemed incredulous, until the tumor was shown him. He gave no evidence of suffering during the operation, and assured me, after it was over, that he did not experience the slightest degree of



Figure 3. 1912 medal honoring Crawford W. Long, issued by the University of Pennsylvania Medical School. From a photo in the Health Sciences Library, Emory University, Atlanta.

pain from its performance."

One effort to reconstruct the scene of Long's use of ether as an anesthetic for surgery appeared on a medal issued in his honor in 1912 by his alma mater, the University of Pennsylvania medical school (Figure 3).²⁸ Another version was painted by Maurice Siegler in the 1930s to exhibit at the Chicago Century of Progress Exposition (Figure 4). A more elaborate depiction, in the form of a small diorama, is housed in the Crawford W. Long

Memorial Museum that stands on the site of Long's office in Jefferson. Long's successor as Village physician replaced his office with a brick building, now the Museum (Figure 5).

Dr. Long used ether at least six more times before he read of the famous event, involving William T. G. Morton as anesthesiologist and John Collins Warren as surgeon, occurring in the amphitheater of the Massachusetts General Hospital on October 16, 1846.²⁹ Long's later op-



Figure 4. Painting by Maurice Siegler of the Long ether operation made for the Chicago Century of Progress Exposition in the 1930s. From a photo in the Health Sciences Library, Emory University, Atlanta.

erations did not all merely repeat the first. He did remove Venable's second neck tumor. In 1842 also he amputated the diseased toe of a slave boy. The next year, Dr. Long removed three tumors from a woman's head, one with anesthesia, two without. In 1845, he amputated two fingers of another slave boy, who was etherized during one operation, but not for the other. Long also extracted a woman's tooth using ether, and employed it to ease his own wife's pain during childbirth.

Two of these operations, permitting Long to compare the pain suffered in similar circumstances, when ether was used and when it was not, relate to the issue of his reticence. He was trying to convince himself, he later asserted, that it was indeed the ether that negated pain. He needed to eliminate a contrary hypothesis. "At the time I was experimenting with ether," he wrote in his initial publication, "there were physicians 'high in authority,' and of justly distinguished character, who were advocates of

mesmerism, and recommended the induction of the *mesmeric state* as adequate to prevent pain in surgical operations. Notwithstanding thus sanctioned, I was an unbeliever in the science, and of the opinion, that if the mesmeric state could be produced at all, it was only on 'those of strong imaginations and weak minds,' and was to be ascribed solely to the workings of the patient's imaginations. Entertaining this opinion, I was the more particular in my experiments in etherization."

The debate over mesmerism — a phenomenon that gradually became known by a new word coined for it in 1843, "hypnotism"³⁰ — would quite properly make an alert young village doctor cautious. In the year Long first used ether, disputes over the mesmeric state received attention in both the English *Lancet* and the American *Journal of Medical Sciences*, published in Philadelphia.^{31,32} And while Long pursued his experiments with ether, he read of an even sharper

controversy within his own state.

Louis Alexander Dugas, born in France but raised in Georgia, received his M.D. by the apprenticeship method. He then studied for 3 years in Paris and returned to become professor of physiology at the Medical College of Georgia.³³ In January, 1845, Dugas removed the cancerous breast of a woman from Columbus after she had been rendered insensible by the ministrations of a mesmerist.³⁴ When she woke, Dugas asked her if she would like to have the operation performed. "She replied, 'the sooner the better,' as she was anxious to get home." Upon finding that the operation was already over, she could scarcely believe it.

Dugas wrote a detailed report of this procedure for the March issue of the *Southern Medical and Surgical Journal*, published by his College. One of the editors was the noted professor of surgery, Paul Fitzsimmons Eve. Eve, born in Georgia, had, like Long, received

Some elderly physicians, reminiscing in 1897 about surgery prior to anesthesia, could compare it with what they had heard about the tortures of the Spanish Inquisition.

his M.D. degree from the University of Pennsylvania.³⁵ He then furthered his studies in London and Paris before returning to Georgia to help found the Medical College. Later Eve would be the first American physician to employ chloroform as an anesthetic. For mesmerism, however, he had no respect whatever, and in the April issue of his journal, Eve wrote a detailed disparagement of this so-called



Figure 5. Museum on the site of Long's office where the first operation using ether anesthetic took place.

force, asserting that Dugas's patient had been in "a trance, or reverie, brought on by the workings of her own feelings."³⁶ Dugas struck back, defending the existence of the "mysterious agency" that had rendered his patient insensible to pain.³⁷

Reading this published debate, sympathizing with Eve's side of the

argument, Crawford Long nonetheless needed to take the mesmeric possibility into account.³⁸ His two controlled experiments persuaded him to reject the mesmeric hypothesis and to eliminate the possibility that his earlier etherized patients happened to have a high spontaneous resistance to pain.

Thus, whether or not Long

thought scientifically in anticipating publication, he behaved scientifically in following up his original discovery. At Pennsylvania he had been trained to be cautious about reporting experimental results.^{39,40} One of his professors, George B. Wood, an editor of the *United States Dispensary*, sought through lectures to improve the quality of American medical publication. He inveighed against the reporting of the isolated experiment and scorned premature announcements. The major American and European journals still abounded in reports of individual exotic cases while Long was experimenting with ether. It seems likely that Wood's injunctions influenced the careful way in which Long conducted his research. Another factor that may have blocked Long's path to print was a hiatus in publication of the *Southern Medical and Surgical Journal* between 1839 and 1845.⁴¹

Dr. Long confessed his own "negligence" at having delayed reporting his results.⁴² Besides his caution, he pleaded as excuses the busy life of a country practitioner and the fact that "surgical operations" were "not of frequent occurrence in a country practice." He stated also that he had been awaiting a "capital operation" that would permit him to extend his experimentation with ether. Months passed, and no such opportunity offered itself. Long "lived in an obscure little town," Dr. J. Marion Sims, another Southern surgical innovator, explained later, "where there were no railroads and no ponderous machinery to maim his fellow-men, and the amputation of a leg or arm was rare in the life of a country doctor."⁴³ Further, as Long himself said, had he engaged in the daily surgery of a city practice—no doubt he was thinking, had he remained in New York—the news of his use of ether would be bound to have come out.⁴⁴

But it had not, and Long confessed to reporting tardily. Nonetheless,

less, he asserted in his 1849 article, he had at last provided "a 'plain, unvarnished' account." And, encouraged by Eve who was now in Nashville, Long had buttressed his printed claims with notarized affidavits secured from the principal participants, the patients and the witnesses, including James Venable. Later, Long was to submit these documents to the U.S. Congress while that august body wrestled with the issue of priority in the great ether controversy.

Before dispatching these docu-

Warning the girls that they must not hold him responsible for any effects the ether might have, Long sniffed the moistened towel, then walked solemnly around the room and kissed each girl in turn.

ments, Long copied them in his own hand and counted them among his most precious possessions. In 1864, a division of Union cavalry threatened Athens, where Long then lived.⁴⁵ The doctor quickly prepared to send his family by carriage to a plantation deemed safe from the raiders. Just as the carriage was departing, Long hurried from the house with a large jar containing some heirloom watches and a roll of papers. These "are most important," he told his oldest daughter, "and under no circumstances must be lost, they are the proofs of my discovery of ether anesthesia." Long besought the girl to bury the jar in a secluded spot until the danger passed. She did so, later recovering the treasure. The papers remained locked in "a little green traveling trunk" in the attic, and

Mrs. Long cautioned her children to leave the trunk alone.

One of Long's daughters later gave Long's holograph copy of Venable's certificate to the Health Sciences Library at Emory University. "I agreed to have one tumor cut out," Venable stated, "and had the operation performed that evening after school was dismissed. . . . I commenced inhaling the ether before the operation was commenced, and continued it until the operation was over. I did not feel the slightest pain . . . and could not believe the tumor was removed until it was shown to me."

Among the major contestants, Long's evidence was unassailable as to priority. The argument that his claim lacked legal stature because he had not published promptly seems to have been first put forward by champions of the New England dentists who were competing before the national Congress for recognition and money in 1854.^{46,47} Thereafter, Long was frequently placed in what the *Lancet* called "the class of jump-up-behinders."⁴⁸ Georgia Senator William C. Dawson had spoken up on behalf of Long — although initially forgetting the doctor's given name — and had presented his evidence.⁴⁹ Senators from two other states also entered new names in the lists. The proliferation of candidates and the growing sectional tension led the Congress to defer, then to abandon, the task of picking a winner.

When, a decade after the end of the Civil War, Marion Sims sought to gain Crawford Long his due, Sims stressed the patriotic point that all the candidates for recognition were Americans.⁵⁰ (He also pointed out that neither New England dentist had published a scientific word: it was the Harvard surgeons who had proclaimed anesthesia to the world.) Yet regional ethnocentrism did not abate, and Long's most ardent champions, like Sims, were Southerners. A 20th century Georgia governor once barred for use in

the state's schools a science textbook that gave credit to Morton and neglected Long.⁵¹

Writers reserved about Long kept stressing the legitimate point that, whatever his excuses, he had failed in a timely fashion to undertake his scientific obligation of presenting the evidence of his discovery. For example, in 1908, William Henry Welch recognized Long's priority but denied him the "larger honor which would have been his due" had he published promptly.⁵² Moreover, Welch stated accurately, when Long did publish, the "details of the mode of administering the ether and depth of anaesthesia" proved to be "meager and unsatisfactory."

These strictures continue to be given in serious commentary, although the tone toward Long becomes less frosty, and the main focus turns toward exploring the reasons for his tardy publication, his "inexplicably secretive behavior," in the words of W. Stanley Sykes.⁵³ Sykes, in an essay entitled "The Reticence of Dr. Long," pub-

The argument that Long's claim lacked legal stature because he had not published promptly seems to have been first put forward by champions of the New England dentists who were competing before the national Congress for recognition and money in 1854.

lished posthumously in 1982, gains from his restudy of Long's career a great respect for the Georgia physi-

cian. He presents evidence to establish that Long was "utterly and rigidly honest," and desired no money but only credit for his discovery, even though he had been plunged into genteel poverty by the war. Weighing Long's excuses for delay, Sykes grants them legitimacy up to January, 1845, when the Southern doctor amputated the two fingers of the slave boy. Long should have gone to press then. The nearly 5 more years before his article was published cannot be excused on grounds of scientific caution.

Sykes ends his "reading of the

The partisan polemical nature of the great ether controversy at the time and in a great deal of the commentary since has tended to direct attention away from another riddle well worthy of scholarly scrutiny.

riddle" by writing: "Long was a modest and unassuming man, who looked upon his profession as a vocation. He was an idealist, with no taint of commercialism. He had the good fortune, and the brains, to introduce something new, but not for a long time did he realize the magnificence of his discovery. Was it likely that an obscure, country doctor could teach something valuable to the expert surgeons of the world? In those early days Long did not, and could not, conceive of the vast increase in surgery to which his work was one of the two contributory factors," surgical cleanliness, of course, being the other. "If you only use something eight times in four years its importance cannot

loom very large however well it works and however efficient it is. Only after the use of ether had been publicised by others . . . did . . . [Long] fully realise the tremendous value of the discovery he had made. . . . That is why Long waited for seven years," Sykes concludes, "because the thing was too incredible and too big."

The partisan polemical nature of the great ether controversy at the time and in a great deal of the commentary since has tended to direct attention away from another riddle well worthy of scholarly scrutiny. More attention has been given to Long's more than 4-year delay in publishing than has been given to the more than 4-decade long delay between Sir Humphry Davy's suggestion in 1800 that nitrous oxide could be "used with advantage during surgical operations"⁵⁴ and the events of the 1840s in Jefferson, Georgia, and Boston, Massachusetts. In addition to Davy's explicit prediction, there was the continuing uncomprehended clue of hundreds of willing exhibitionists bumping painlessly into furniture during theatrical demonstrations of nitrous oxide and ether.

Whatever the causes for delay, and whatever the reasons that the delay should end in the United States, the decade of the 1840s was destined to be the period for a classical case of multiple discovery. The time was ripe. "Discoveries become virtually inevitable," in the words of the noted sociologist Robert K. Merton, "when prerequisite kinds of knowledge and tools accumulate in man's cultural store and when the attention of an appreciable number of investigators becomes focussed on a problem, by emerging social needs, by developments internal to the science, or by both."⁵⁵ "The Robinson Crusoe of science," Merton added, is an illusion, "just as much a figment as the Robinson Crusoe of old-fashioned economics." Yet the reward system of science stresses originality. The

stress so engendered, Merton suggested, accounts for a certain amount of deviant behavior among scientists: undue secretiveness, premature publicity, "violent conflicts over priority," including the suspicion that the other contestants have pilfered one's own discovery, as occurred during the great ether controversy. This multiple discovery aspect of anesthesia deserves more explicit study.

Throughout the rest of his life, Crawford Long engaged in no new medical pioneering. In 1850, he moved to Atlanta and built a brick combination house and office on a half-acre lot, where he stayed almost 5 years.⁵⁶ The cultural climate, however, seemed rather raw. So he moved to longer-established Athens, where he had gone to college. He bought a drugstore which he operated with his brother, and he continued to practice medicine. Dr. Sims wrote in 1877 that "Long lost his all during our great civil war, and in his old age he is now being worked to death for the daily bread necessary to support himself and family."⁵⁷ The recollections of his wife and daughters do not present so grim a picture. Long died the year after Sims's article appeared, the article, Welch averred, that led to Long's work becoming "generally known."⁵⁸

References

1. James Harvey Young is Charles Howard Candler Professor Emeritus of American Social History at Emory University. The first version of this essay, entitled "Crawford W. Long, M.D., A Georgia Innovator," was presented as The Wood Memorial Library-Museum of Anesthesiology's Fifth Annual Historical Lecture on October 20, 1971, at the meeting of the American Society of Anesthesiologists in Atlanta. In this form, the essay was published in the *Bulletin of the New York Academy of Medicine*, 2nd series, 1974:50:421-37, and republished in Saul Jarcho, ed., *Essays on The History of Medicine*, New York: The New York Academy of Medicine, 1976, pp. 192-208. Considerably revised, it was presented under the present title to the inaugural meeting of the Anesthesia History Association in Atlanta on October 9, 1983. Revised once more, it was given as the Crawford W. Long Lecture at the Emory University Department of Anesthesiology Postgraduate Course on April 12, 1984. The author expresses his appreciation to the editor of the *Bulletin of the New York Academy of Medicine* for his permission to have an essay first appearing in the

Bulletin's pages republished here in its considerably modified form as a tribute to Dr. Long on the occasion of the sesquicentennial of his pioneering use of ether.

2. Biographical details in this article come from Taylor FL, Crawford W. Long & the Discovery of Anesthesia, New York: Paul B. Hoeber, 1927; Boland FK, The First Anesthetic: The Story of Crawford Long, Athens: University of Georgia Press, 1940; and Spalding P. Long, Crawford Williamson. In, Coleman K and Gurr CS, eds, Dictionary of Georgia Biography, Athens: University of Georgia Press 1983;II:630-31.

3. Reed TW. History of the University of Georgia. Unpublished manuscript,II, 339,364. Hargrett Rare Book and Manuscript Library, University of Georgia.

4. Atlanta pharmacist Joseph Jacobs, who had been an apprentice in Long's Athens drugstore, provided most of the money to have Long's statue sculpted by John Massey Rhind and installed in the Capitol. Jacobs J. Some Personal Recollections and Private Correspondence of Dr. Crawford Williamson Long. Atlanta: privately printed, 1919.

5. Southern Banner, Athens, August 8, 1878.

6. Information provided by James Z. Rabun, Emory University.

7. Brieger GH, ed. Medical America in the Nineteenth Century. Baltimore: Johns Hopkins Press, 1972, pp 59-60.

8. Ibid, p 67.

9. Ibid, p 5.

10. Duffy J. American medical ethics and the physician-patient relationship. In, Shelp EE (ed). The Clinical Encounter. Dordrecht: D. Reidel, 1983, p 70.

11. Brieger, Medical America, p 62.

12. Duffy J. The Healers: The Rise of the Medical Establishment. New York: McGraw-Hill, 1976, pp 98-188.

13. Duffy, American Medical Ethics, p 70.

14. Holmes OW. The contagiousness of puerperal fever. In, Holmes. Medical Essays. Boston: Houghton, Mifflin, 1891, pp 103-72.

15. Brieger, Medical America, p 163-65.

16. Pullen JJ. Gentlemen, *This* is no humbug. American Heritage Aug-Sep. 1979;30(5):81.

17. Brieger, Medical America, pp 163-65.

18. Long CW. An account of the first use of sul-

phuric ether by inhalation as an anaesthetic in surgical operations. South Med Surg J 1849;5:705-13.

19. Boland. The First Anesthetic, p 28.

20. Long. An account of the first use of sulphuric ether.

21. Incomplete facsimile copy of letter, Long to Robert H. Goodman, February 7, 1842, Crawford W. Long Collection, Hargrett Rare Book and Manuscript Library, University of Georgia.

22. Flexner JT. Doctors on Horseback: Pioneers of American Medicine. New York: Viking, 1944, p 299.

23 [Eugenia Long Harper] to Mrs. Corn, February 10 [no year date], Bell Family Papers, Hargrett Rare Book and Manuscript Library, University of Georgia.

24. Long to Caroline Swain, March 14 and April 20, 1842, and Caroline to Long, April 8, 1842, Box 1, Crawford W. Long Family Papers, Hargrett Rare Book and Manuscript Library, University of Georgia. Caroline to Long, April 25, 1842, Crawford W. Long Memorial Museum, Jefferson.

25. Jacobs. Some Personal Recollections, p 7.

26. Long to D.L. Swain, June 4, 1866, Long Collection, Hargrett Rare Book and Manuscript Library, University of Georgia.

27. Long. An account of the first use of sulphuric ether.

28. The Health Sciences Library at Emory University has photographs of the 1912 medal and the painting of the 1930s.

29. Long. An account of the first use of sulphuric ether.

30. Shaw LH. Hypnosis in practice. London: Bailliers Tindall, 1977, p.67.

31. Hydropathy and animal magnetism. Lancet 1842;1:830-33.

32. Fosgate B. Catalepsy induced by animal magnetism. Am J Med Sci 1842;3:131-34.

33. Spalding P. Degas, Louis Alexander. In, Coleman and Gurr, 1,273-74.

34. Dugas LA. Extirpation of the mamma. South Med Surg J 1845;1:122-25.

35. Spalding P. Eve, Paul Fitzsimmons. In, Coleman and Gurr, 1,299-300.

36. Eve PG. Mesmerism, or animal magnetism. South Med Surg J 1845;1:167-92.

37. Dugas LA. Remarks on a lecture on mesmer-

ism. Ibid. 1845; 1:236-45.

38. Long. An account of the first use of sulphuric ether.

39. Boland. The First Anesthetic, pp 26,27.

40. DeCosta JC. Crawford W. Long. In, Memorial to Dr. Crawford W. Long. Account of the Ceremonies. Philadelphia: University of Pennsylvania Special Bulletin, 1912, pp 8-15.

41. Krafka J. Long, Eve and Dugas. J Med Assoc Ga 1944;33:331.

42. Long. An account of the first use of sulphuric ether.

43. Sims JM. The discovery of anaesthesia. Va Med Monthly 1877;4:81-100.

44. Long. An account of the first use of sulphuric ether.

45. Taylor. Crawford W. Long, pp 126-29, 134-35.

46. Congressional Globe, 33rd Congress, 1st session, part 2, 934-44, 963, April 19 and 21, 1854.

47. Sims. The discovery of anaesthesia.

48. The history of anaesthetic discovery. Lancet 1870;1:840-44.

49. Congressional Globe, 33rd Congress, 1st session, part 2,943-44.

50. Sims. The discovery of anaesthesia.

51. Unidentified clipping relating to Governor E.D. Rivers (1937-41). In, Crawford W. Long Scrapbook compiled by Eugenia Long Harper, Piromis Hulsey Bell Papers, Atlanta Historical Society.

52. Welch WH. A Consideration of the Introduction of Surgical Anaesthesia. [Baltimore?]: privately printed, 1908.

53. Sykes WS. The reticence of Dr. Long. In, Sykes WS. Essays on the First Hundred Years of Anaesthesia. Edinburgh: E.&S. Livingstone, 1960-68, III, 1-13.

54. Davy H. Researches, Chemical and Philosophical, Chiefly Concerning Nitrous Oxide, or Nitrous Air, and Its Respiration [1800]. In, Davy H (ed). The Collected Works of Sir Humphry Davy. London: Smith Elder, 1839-40,III,329.

55. Merton RK. Resistance to the systematic study of multiple discoveries in science. Arch Européennes de Sociologie 1963;4:237-82.

56. Mason JW. Dr.Crawford W. Long in Atlanta. Atlanta Historical Bulletin 1951;9:65-67.

57. Sims. The discovery of anaesthesia.

58. Welch. A Consideration of the Introduction of Surgical Anaesthesia.

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A Countryman's Notes: On a Horse Named Boone

Philip T. Schley, MD

MY OLD FRIEND IS DEAD. There is more than sadness, for with his dying, I feel diminished. For over 20 years he was there. He depended on me, and with his gentle dependence, he enhanced my life.

Boone was in his 31st year. He was of interesting breeding. A lady from Oklahoma had decided that if she crossed an Appaloosa stallion with a Belgian mare, the combination (Appaloosa quickness and intelligence with the strength and size of the Belgian) should produce a horse admirably suited for jumping fences. In his case, her thinking proved to be correct.

Boone was many things: He was boss horse in whatever pasture life found him. He ate first, and was, consequently, a good keeper. He achieved dominance in an interesting way. He maintained his position in the order of things by a sort of quiet assertion of will. He was not aggressive. I don't ever recall seeing him physically intimidate another horse. If attacked, how-

He was boss horse in whatever pasture life found him . . . he was a lover of children . . . a comedian . . . but most of all he was a fox hunter.

ever, his response was immediate, massive, and successful. He was a lover of children. He came to them when the opportunity presented itself, and by the way he approached them, disarmed them. When he lived at Midland, large numbers of youngsters overcame a natural (and probably healthy) reticence with horses by being exposed to Boone. He was a comedian. He could sit on one haunch in such a way as to make you laugh. He

could exasperate you with stubbornness, when being encouraged into a trailer, and then convulse you by backing into the trailer, looking you in the eye, and making certain no further swat with a lead-rope on his backside was forthcoming.

But whatever else Boone was, most of all he was a fox hunter. I had acquired him in the late 60s from Dr. and Mrs. Robert Flowers under a most unusual agreement. Bobby called to tell me that he had a horse in his pasture that had voluntarily jumped a 5-foot fence in order to reach some newly-green rye grass. He thought the horse might make a fox hunter. We agreed that we would take him to Midland and see if the lady there (a charming English woman named Ann Tice-Hurst) could do anything with him.

With patience and skill, just about any horse can be taught to jump things. Though most don't like it, there are natural jumpers who do it because they enjoy it.

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Lippizaners are such horses. And Boone was such a horse. He did not jump with much style. I caught a good bit of ribbing from some of my toney friends because of his big feet, his shaggy mane, his outsized head, etc. But if Boone refused to jump, I knew it was for a reason, and I went along with him. If he refused, he would then walk up to the jump, stick his head over, look around, and check the terrain. Satisfied, he would back off, reapproach, and sail over.

He loved hunting. He liked the bunches of horses and people, the jumping, and the excitement of a run. I even think he liked the scarlet coats of the men. He enjoyed the "music" of the hounds. Long after he was retired, when a neighbor's coon hound would bay, his ears would go forward, his muscles tense, and his whole attitude would say, "Hey, let's go!"

We chased foxes together for 13 seasons, far longer than most hunters are active. During that time, he helped my wife and daughter get their colors. One son hunted him. Numbers of friends hunted him. Finally, at age 19 or 20, it was obvious that though the spirit was willing, a 2 or 3-mile run was becoming out of the question. We hilltopped* for a while, and then gave it up altogether. Boone moved home. We got him an Arab gelding for company, and he lived a happy and healthy life for 9 more years.

The old man always lost weight in the winter and regained same on the spring and summer

*Follow the hunt from vantage point to vantage point, without joining the main body of hunters.

grasses. Last year, he started losing weight earlier. And when spring came, he continued to slowly lose. From his usual 1,600 pounds, he must have lost down to 1,300 or 1,400. We had his teeth floated. We wormed and rewormed him. We continued to experiment with his rations. Still, he lost weight. The vet felt that he was simply no longer able to adequately absorb his food.

Last weekend, he seemed about the same as usual: thin, but keen and still insisting that friend Twister stay away from his food. Two nights ago, Mr. Lane, who lives on the farm, called to say that he was down. I was giving a paper to my study group at the time, and Margot held off telling me about Boone. At about 11 p.m., we went up and found him lucid, but unable to get up. He was hungry, and ate a gallon of sweet feed. Not being able to get his head up, he had great difficulty in drinking. It was not a particularly cold night, and we broke up some bales of hay and put them all around him and under him. We covered him with a blanket and left him alone for a time. Early the next morning, he seemed very much the same. He was again hungry and ate well. It seemed to me that he was confused. He was unable to make his muscles do what they were supposed to do. He would go through the motions of trying to get up, but couldn't do it. I strongly feel that he may have had a CVA. He seemed to be in no pain, and, so long as I was there, he was calm. My good friend, Dr. Paul May, came up and had a look. He confirmed my suspicions that any sort of successful outcome was highly unlikely. We agreed that he would give him a concentrated intravenous feeding

He did not jump with much style. I caught a good bit of ribbing from some of my toney friends because of his big feet, his shaggy mane, his outsized head, etc.

with vitamins and minerals. This seemed to strengthen him, but he still could not get up. By now, he was developing a small decubitus on the earthward side of his head. I realized that something would have to be done. After office hours, we had a nice long visit. We talked about good times. Thoughts of the places we had been, the runs we had had, and our friendship flooded my mind.

About midnight, it was obvious that he was beginning to have some slight shortness of breath. He was interested in the sweet feed, but would no longer eat. I went home about one o'clock, knowing that a decision had to be made, and realizing that I was incapable of administering the necessary release. Dr. May had told me that he would do whatever I wished and whenever I wished. This morning, Margot, bless her, agreed to go and look at him, as I felt so drained that I was unable. I called her between cases, and she told me that he'd died probably sometime shortly after I left the preceding evening. "You see," she said, "he kept you from having to make the decision. He was courteous to the last."

Hospital/Physician Joint Ventures Take Another Direct Hit

Robert N. Berg

THE DECADE OF THE 1980s saw a tremendous influx of hospital/physician joint ventures. Throughout the country, hospitals and their medical staffs became "partners" in a wide variety of business arrangements, ranging from ownership of medical office buildings to the establishment of "off-campus" facilities, such as outpatient surgical centers, diagnostic facilities, clinical laboratories, and the like. Multiple justifications were offered in support of these ventures; hospitals and physicians cited reasons such as better allocation of resources, increased quality of patient care, encouraging or rewarding physician loyalty, and other, similar reasons.

Over the past several years, however, as health care costs have continued to rise, hospital/physician joint ventures have come under both increased scrutiny and increased attack. The Office of Inspector General (OIG) of the U.S. Department of Health and Human Services (HHS) has sought to enforce existing Medicare/Medicaid laws in a more stringent manner. Congress has enacted new legislation, curbing physician ownership of clinical laboratories rendering services under the Medicare and Medicaid programs. More recently, the OIG enacted final "safe harbor" regulations which, to no one's surprise, provided little practical aid to hospitals and physicians, in terms of protecting joint ventures from the risk of criminal or civil attack under the Medicare/Medicaid anti-kickback statutes.¹ Even the American Medical Association has gotten into the act, announcing, at its De-

‘The IRS has reversed itself: it now takes the position that charitable hospital indeed may risk losing their tax-exempt status if they enter into certain types of arrangements which the IRS had previously approved.’

cember, 1991, House of Delegates meeting, the adoption of a new policy making it "presumptively inconsistent with a physician's fiduciary duty" for that physician to send patients to businesses in which he or she has invested.

Now, the Internal Revenue Service (IRS) has scored a direct hit on hospital/physician joint ventures involving hospitals which are exempt from taxation under Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (the Code). Specifically, the IRS Office of General Counsel recently issued a Memorandum² reversing three private letter rulings which had been issued in the mid-1980s, rulings which had sanctioned the participation by tax-exempt hospitals in certain types of hospital/physician joint ventures. This recent IRS attack is the subject of this month's LEGAL article.

This article was prepared at the request of the Journal. Mr. Berg is a principal in the law firm of Vincent, Chorey, Taylor & Feil, Suite 1700, The Lenox Building, 3399 Peachtree Rd., Atlanta, GA 30326. Send reprint requests to Mr. Berg.

Background

Before discussing the specifics of the General Counsel's Memorandum, it may be helpful to first provide some brief background information on the nature of a hospital's tax-exempt status. Section 501(c)(3) of the Code provides that certain types of charitable organizations, such as hospitals, may obtain an exemption from federal income taxes. Among other things, the organization must ensure that "no part of [its] net earnings inure to the benefit of any private shareholder or individual." Moreover, the organization must be operated exclusively for one or more exempt purposes. Violations of these prohibitions are commonly referred to as "private inurement."³

Tax-exempt charitable organizations, including hospitals, are scrutinized closely, so as to ensure that their charitable assets are dedicated exclusively to furthering public purposes and that there is no private inurement. For example, private inurement issues may arise if a tax-exempt hospital were to pay an unreasonable high salary to one of its employees. Similarly, any transaction found to constitute the payment of dividends or dividend-like distributions to "insiders" of the hospital (including, according to the IRS, not only officers and directors, but also any of the physicians on the medical staff of the hospital⁴) may be found to be private inurement, resulting in the loss of the hospital's tax-exempt status.

In the latter part of the 1980s, the IRS issued three private letter rulings,⁵ approving the participation

by tax-exempt hospitals in a specific type of joint venture arrangement with physicians. Typical of these rulings was a Private Letter Ruling issued by the IRS in 1988,⁶ approving a plan by a tax-exempt hospital to establish a limited partnership with members of its medical staff. An affiliate corporation of the tax-exempt hospital served as the general partner, and the physicians on the medical staff served as limited partners, owning between 50% and 90% of the venture. The purpose of the limited partnership was to purchase the net revenue stream of the hospital's outpatient surgery and gastroenterology departments for a period of 5 years. The purchase price was established by an independent appraiser at fair market value, discounted to present value.

“The IRS action is a signal that the IRS is looking much more closely at hospital/physician ventures involving tax-exempt hospitals and that justifications for these ventures which were once accepted by the IRS may not be accepted in the future.”

Under the proposal, the hospital continued to own and operate the facilities. It justified the transaction by pointing to the fact that it would receive cash at the beginning of the 5-year period; it also pointed to the increased utilization of its facilities and its desire to obtain loyalty from the members of its staff. The IRS

accepted these justifications, finding that the transaction would not constitute private inurement and thus would not jeopardize the hospital's tax-exempt status. Two other Private Letter Rulings issued by the IRS reached similar conclusions.

The IRS Reverses its Position

Less than 3 years later, the IRS apparently has reversed its position, essentially overruling its previously issued Private Letter Rulings.⁷ Instead, the IRS now takes the position that charitable hospitals indeed may risk losing their tax-exempt status if they enter into certain types of financial arrangements with the physicians on their medical staffs, including the types of arrangements which the IRS previously had approved.

The IRS cited three main reasons in support of its policy reversal. First, the IRS suggested it now had serious reservations with the purported justifications for the hospital/physician joint ventures, in terms of the return to the tax-exempt hospital obtained by providing a benefit to the physician investors. More specifically, the IRS concluded that the joint ventures in fact were structured not to serve the public purposes of the tax-exempt hospitals, with incidental benefits provided for the physician-investors; rather, according to the IRS, the true reasons for the venture were far more “private” than “public.” As stated in the Memorandum, “we believe that hospitals engaged in these ventures largely as a means to retain members of their medical staff; to attract their admissions and referrals; and to preempt the physicians from investing in or creating a competing provider.”⁸ From this, the IRS concluded that these types of arrangements conferred a primary benefit on private investors, thereby resulting in private inurement in violation of Section 501(c)(3).

Second, the IRS focused on the specific type of transaction involved — the purchase of the hospital's net revenue stream from a particular department — and concluded that this type of transaction could not be justified as furthering the hospital's tax exempt purposes. The IRS noted that some types of hospital/physician relationships — those providing for the combination of the resources of the hospital and its professional staff — may provide a limited, incidental benefit to the physicians, while also providing an overwhelming public benefit. In contrast, the IRS found that “the private benefits conferred on the physician-investors by the instant revenue stream joint ventures are direct and substantial, not incidental. . . . The public benefit expected to result from these transactions — enhanced hospital financial health or greater efficiency achieved through improved utilization of [hospital] facilities — bears only the most tenuous relationship to the hospitals' charitable purposes of promoting the health of their communities. Obtaining referrals or avoiding new competition may improve the competitive position of an individual hospital, but that is not necessarily the same as benefitting its community.”⁹

Finally, the IRS suggested that engaging in this type of hospital/physician joint venture posed a serious risk of violating the Medicare/Medicaid anti-kickback provisions, and from this, constituted conduct inconsistent with continued exemption as a charitable organization under the Code. According to the IRS, this type of venture could be viewed as a “sham” transaction, designed to compensate the physician investors for referring patients or specimens to the participating hospital. If so, this would constitute a clear violation of the anti-kickback statutes and, as a result, require the revocation of the partici-

pating hospital's tax-exempt status.

Conclusion

Read narrowly, the IRS' recent policy reversal might be seen as having a very limited impact on hospital/physician joint ventures, as very few ventures, to our knowledge, involve the purchase of a hospital's net revenue stream. It would be more appropriate, we would suggest, to take a more broad view of the IRS' action: it is a signal that the IRS is looking much more closely at hospital/physician ventures involving tax-exempt hospitals; it is a signal that justifications for these ventures which were once accepted by the IRS may not be accepted in the future; it is a signal that, where tax-exempt hospitals are involved in joint ventures which provide significant financial returns

to physicians who are members of the professional staff at that hospital, the IRS is much more likely to challenge that venture on the grounds that it provides private inurement to the physician investors, thereby jeopardizing the tax-exempt status of the hospital. Since the loss of tax-exempt status could provide a crippling blow to charitable organizations such as hospitals, the IRS' policy reversal may have a dramatic impact on the future of joint venture arrangements between physicians and tax-exempt hospitals.

Notes

1. For a more detailed look at these items, see Berg RN. The continuing saga of the Medicare/Medicaid anti-kickback provisions: "safe harbors" or "dangerous minefields"? J Med Assoc GA 1991;80L715.

2. GCM 39862 (November 22, 1991), 1991 IRS GCM LEXIS 39, (Memorandum).

3. See Treas Reg 1.501 (c)(3)-1(c)(1). Memorandum, 1991 IRS GCM LEXIS 39, at p. 8.

4. Memorandum, 1991 IRS GCM LEXIS 39, at pp. 8-9.

5. A private letter ruling is a direct response by the IRS to the taxpayer who sought its opinion. It applies only to the factual situation described and, as a technical matter, cannot be used or cited as precedent. Code Section 6110(j)(3). In practice, however, private letter rulings are often used to announce the IRS' view of a particular transaction.

6. PLR 8820093 (Feb. 26, 1988). See also, PLR 8942099 (July 28, 1989); unpublished PLR issued September 13, 1984.

7. A General Counsel Memorandum (GCM) is legal advice provided to the IRS by the Office of Chief Counsel, which serves as legal counsel to the IRS in Washington, DC. GCMs are available to the public and, in some instances, are helpful to taxpayers in structuring transactions or in attempting to predict future positions of the Service. However, the effect of a GCM is quite limited. Such documents represent "merely the opinion of a lawyer in the agency and must be accepted as such." *Stubbs Overbeck & Assoc v United States*, 445 F.2d 1142 (5th Cir. 1971); thus, by law, GCMs are not binding upon the courts, nor can any party, including the IRS, rely upon GCMs as precedent.

8. Memorandum, 1991 IRS GCM LEXIS 39, at pp. 11-12.

9. Memorandum, 1991 IRS GCM LEXIS 39, at p. 15.

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Computerized Cancer Information Sources

Martha C. Watkins, MLS

THE NATIONAL CANCER INSTITUTE, in preparing for the year 2000, has estimated that if state-of-the-art cancer treatment were applied in all cases that the cancer mortality rate could be reduced 10-15% in the U.S. in the next 10 years.¹ Ready availability of the most current information on prevention, screening, and treatment of cancer is essential, therefore, for health care professionals to achieve this goal.

The National Cancer Institute and the National Library of Medicine, in cooperation with other agencies, have developed several computerized information services to meet these information needs. These services are widely available in health science libraries in Georgia. Individual physicians who wish to search these services personally can contact directly with the many vendors who make these databases available. MEDLARS,[#] the National Library of Medicine's computerized information services (which includes all of the databases described in this article) is the primary vendor of these databases and other commercial vendors such as BRS/Colleague, Dialog, and Data-Star use their own search software to search the databases provided to them by MEDLARS.

In addition, the Georgia Interactive Network for Medical Information (GaIN), based at Mercer University School of Medicine, provides a Medline subset of 500 journals including the major cancer journals.²

[#] MEDLARS, MEDLINE, CANCERLIT, and PDQ are registered trademarks of the National Library of Medicine.

Ready availability of the most current information on prevention, screening, and treatment of cancer can enable health care professionals to achieve the National Cancer Institute's goal of a 10-15% reduction in cancer mortality by the year 2000.

Most of the databases available online are bibliographic databases — they contain references to journal articles, books, meeting abstracts, and/or technical reports. There are also databases which are totally factual and are used much as a reference book or encyclopedia. Others, such as the National Library of Medicine's Physicians Data Query (PDQ),[#] contain both factual and bibliographic data.

MEDLINE#

Developer: The National Library of Medicine

Time span: 1966 to the present; weekly updates

Scope: 3700 journals published in English and foreign languages

Ms. Watkins is Assistant Director and Head of Public Services, Mercer University School of Medicine, Medical Library, 1400 Coleman Ave., Macon, GA 31207.

Database type: Bibliographic, includes abstracts

Highlights: For journal articles on cancer, MEDLINE offers comprehensive international journal coverage and uses the Medical Subject Headings (MeSH) to index materials. This database is updated on a weekly basis and will be the most up-to-date of all the databases.

Availability: MEDLARS, BRS/Colleague, Data-Star, Dialog among others

CANCERLIT#

Developer: International Cancer Research Data Bank of the National Cancer Institute and the National Library of Medicine

Time span: Limited materials 1963-1973; coverage began in 1974; updated monthly

Scope: All cancer journal articles from the MEDLINE database enhanced with conference proceedings and meeting abstracts, government reports, selected books, symposia, and theses; includes about 200 foreign language journals

Database type: Bibliographic, includes abstracts

Highlights: This is a comprehensive source for oncology meeting abstracts and conference proceedings. Because all articles have an abstract online, textword searching often retrieves many articles on very specific topics which will not be retrieved on MEDLINE where only 60% of the articles have abstracts.³ CANCERLIT also uses the MeSH vocabulary for consistency of indexing and ease of retrieval.

Availability: MEDLARS, BRS/Colleague, Data-Star, Dialog

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ADVERTISING INDEX

American Medical Association	148
Cheraw Family Medicine	149
Classified Advertisements	149
Georgia Hospital Association	117
Georgia Nongame Wildlife Program	128
Health Quip, Inc.	149
The High Museum of Art at Georgia-Pacific Center	118
The Kirwan Companies	99
Knoll Pharmaceuticals	146
Lilly, Eli & Company	116, 117, 147
MAG Mutual Insurance Company	142
Palisades Pharmaceuticals, Inc.	147
Practice Management Services	115
Remote Imaging	98
Roche Laboratories	107
Searle, G. D.	152
U.S. Air Force	100
U.S. Air Force Reserve	117
U.S. Army Reserve	112
Vein Clinics of America	151
Walton Rehabilitation Hospital	100

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MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely to this *Journal*. **Manuscripts should be submitted on a 5¼" disc or a 3½" diskette compatible with IBM WordPerfect 5.1 or in ASCII format. Hard copy (double spaced, typewritten) should be sent with the disc/diskette.** Hard copy should be submitted in duplicate. Receipt of manuscripts will be acknowledged.

STYLE — Articles should range in length from 3000 to 4000 words. Footnotes, references, and photo legends should be typed on separate sheets, double-spaced. References should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages. **Articles with references that do not conform to the *Journal's* style will be returned.**

Sorter NA, Wasserman SI, Austen KF.
Cold urticaria release into circulation of
histamine and eosinophil chemotactic
factor of anaphylaxis during cold chal-
lenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

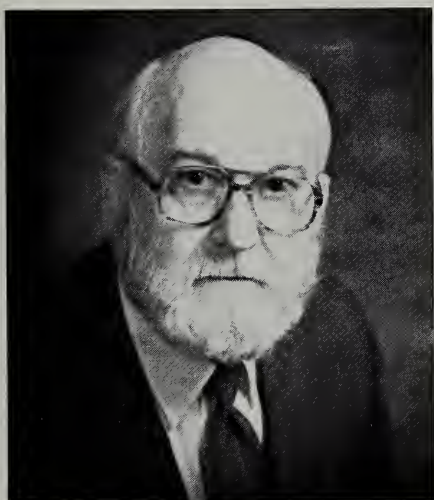
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Cyler D. Garner, M.D.

Really Bad Reimbursements at Various Stages (RBRVS)

I RECEIVED A CALL the other day from a colleague who was angry about cuts he is experiencing in Medicare reimbursements through the new RBRVS, which my staff is calling Really Bad Reimbursements at Various Stages. All I could tell him was, it could have been much worse.

The fact is that RBRVS is the result of more than 9 years of effort by the federal government to curb government-paid physician fees. The federal government first went after hospital costs through the diagnosis-related groups (DRG) payment systems. That in hand, it went after physicians.

When William Roper was head of the Health Care Financing Administration (HCFA), he pushed for a number of "cost-saving measures." One involved Georgia physicians and HCFA's new Medicare carrier, Aetna, and HealthCare Compare.

The way was thus paved for RBRVS, which was seen as the answer to adjusting the problems between primary care services and specialty procedures. It was also believed it would standardize payment and remove the effects of physicians' historical charges, thereby removing inequities in the charge-based system.

By the mid-1980s, the AMA and some 20 national specialty societies began to work with a Harvard study under researcher William Hsiao, PhD. The work continued for 3 years, and

the results are in the Omnibus Budget Reconciliation Act of 1989, which included the physician payment reform package. The original purpose was to develop the fee schedule, but Congress being Congress, other payment policies and coding changes were folded in that would significantly affect Medicare billing and payment.

On June 5, 1991, HCFA released the proposed rules for physician payment reform, and the effect created new watermarks for resistance when it was discovered that the Bush Administration was attempting to use the new payment system to balance the budget.

MMAG and the rest of organized medicine participated in a massive letter-writing campaign to protest the method used to arrive at the conversion factor. More than 100,000 letters poured in to HCFA offices. Congress, including Pete Stark of California, who is not one of our friends, joined in the call for an increase in the conversion factor and other changes. We did get some important changes:

1. The conversion factor was increased to \$31 from \$26.87, a 13% increase.
2. Anesthesiologists will continue to be paid on the basis of actual time rather than average time.
3. Behavioral adjustment was de-

creased from 6.5% from 10%, which had been an especially insulting attempt by the White House to cut the Medicare funds.

4. The new global surgery definition decreases the pre-operative period to one from 30 days. The postoperative period for minor surgeries is 10 days.
5. Four new modifiers were added for reporting services provided in the postoperative period.
6. Payment for physician-dispensed pharmaceuticals will be the average wholesale price or the estimated acquisition cost, whichever is lower.

So it *could* have been worse. MAG and other associations and specialty societies have devoted untold hours working to correct problems in Medicare payments. We continue to do that legislatively, with the AMA, and through a series of excellent seminars provided through MAG. Please let us know of problems you have had with the new payment system. We need that information to get changes made.

Cyler D. Garner, M.D.

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PAUL HARVEY

The most beautiful thing we can experience is the mysterious. It is the source of all true art and science. He to whom this emotion is a stranger, who can no longer pause to wonder and stand rapt in awe, is as good as dead; his eyes are closed. This insight into the mystery of life, coupled though it be with fear, has also given rise to religion. To know that what is impenetrable to us really exists, manifesting itself as the highest wisdom and the most radiant beauty which our dull faculties can comprehend only in their most primitive forms — this knowledge, this feeling, is at the centre of true religiousness. In this sense, and in this sense only, I belong in the ranks of devoutly religious men.

I cannot imagine a God who rewards and punishes the objects of his creation, whose purposes are modelled after our own — a God, in short, who is but a reflection of human frailty. Neither can I believe that the individual survives the death of his body, although feeble souls harbour such thoughts through fear or ridiculous egotism. It is enough for me to contemplate the mystery of conscious life perpetrating itself

‘We must decide if the *Journal* is accomplishing a purpose, attaining a worthwhile objective and goal, which is to the benefit of the membership or the organization, and beyond this, a benefit to the provision of a better health care system in this state. 9

through all eternity to reflect upon the marvelous structure of the universe which we can dimly perceive, and to try humbly to comprehend even an infinitesimal part of the intelligence manifested in nature.

ALBERT EINSTEIN, *What I Believe*
MARK BOOTH, Editor

Value. I have been thinking about it, that word “value,” a lot this past year. Ever since the decision was made at the 1991 House of Delegates of this organization to establish the 1991-1992 budget for the production of this *Journal* at fifty thousand dollars less than the Managing Editor and the Editorial Board asked for. I was a part of that final decision, in fact, for at one

point in the deliberations, I was asked if the *Journal* could be produced for \$150,000 and I said, sadly, I fear, in a flippant mood, “Certainly we can put it out for \$150,000. It won’t be the same *Journal* but we can put it out for that.” Unfortunately, those hearing that remark remembered the first statement and forgot the second one. There was also more unrealized truth in the quotation “put it out” — as in “out of business” — than even I appreciated.

But about value. It means so many things and finds its way into so many of our conversations. In particular it is a frequent occupant of our social discourse as we speak of the value, the quality, of that health care which we as physicians provide our patients. We talk of the value of a parcel of land or of its appreciation in value. We ask of ourselves if there was value received when we make a purchase. And in our personal relationships, we talk of the value of knowing a particular person when we say, “You will find some day that knowing him or her will be valuable to you.” The word seems to permeate our social and our materialistic lives.

When I was asked to be the Editor of this *Journal* in the fall of 1987, I expressed several opinions and made a request or so to the Executive Committee, this Publications Committee, of this *Journal*. I

said at that time that I thought a certain degree of freedom should be allowed the *Journal* and its Editorial Board in order to produce an environment conducive to unfettered expression of belief or thought. In a more than generous manner, we have been accorded that freedom. I suggested that the *Journal* should be a means whereby individuals not yet in the mainstream of medical-scientific writing could begin their first efforts at such writing — interns, residents, and younger faculty members. I thought that the publication should serve as a means of conveying useful and newly developing socioeconomic issues to the membership. I thought that it should be interesting from the standpoint that it would attract a significant number of us to simply open its pages and peruse it.

Now after these nearly five years have passed, I look back and ask myself if those objectives have in some way been accomplished. I ask in particular if the *Journal* has been a "valuable" part of the Medical Association of Georgia. In general, I think I think we have been able to accomplish most of those objectives. Of concern, however, has been the year 1991-1992. Budgetary restrictions on the *Journal* during that period of time led to necessary constraint in several areas which we conceive to be our mission. With the cost of printing being our major economic outlay, it became necessary to reduce the size of the publication. This meant leaving out certain features to which we had become accustomed. When

the Cancer Page was late in arriving for the publication deadline, we failed to push for its production, taking solace in the fact that here was one more place to reduce cost. When scientific articles submitted for publication began to accumulate, we began to send letters to the authors expressing a regret that space limitation kept us from publishing those articles in a timely manner. It takes but little imagination to realize that should we send many of those letters out, then the word will get around that it is of little use to send material to the *Journal of the MAG* for it usually gets returned without being published. All of this led me in the period 1991-1992 to question more seriously the "value" which we place on this *Journal*. I look back at this period in the history of this now more than one hundred year-old-publication and ask myself if we got our money's worth out of this particular year past.

In the daily social and professional lives of each of us, there is the need to establish priorities, else we exist in a state of unacceptable confusion and fragmentation. There is an absolute necessity to provide for our daily existence a "value system." It need not be a good or an ethical value system, but in some form it must exist. Into that organizational value system of the MAG we must fit this *Journal*. We must decide if it is accomplishing a purpose, attaining a worthwhile objective and goal, which is to the benefit of the membership of

the organization, and beyond this, a benefit to the provision of a better health care system in this state. We must ask hard questions. Could the dollars used to produce it be put to better use elsewhere? Are our legislative efforts of such importance and the results they provide us worthy of their cost and if so should yet another lobbyist be employed? Does the *Journal* provide a mechanism whereby we can honestly say to our critics, "Here is an example of our willingness to spend our organizational resources to further our ability to care for the sick and injured in an effective and cost conscious manner?"

These questions and others must be asked later this month when our House of Delegates convene. The answer to those varied questions is not clear to us all, but of one thing I am certain. It is that if the *Journal of the MAG* has a "value," if it is worth doing, then it is worth doing well. This past year has convinced this Editor that although we did the best we could, the availability of adequate funds would have provided us with the means to reach toward excellence. To provide real value. Therein lies the question which begs the decision later this month when the House of Delegates convenes in Atlanta. That decision comes close to what David Lloyd George, the English statesman, was talking about when he remarked in the House of Commons, "When a giant step is called for, do not be afraid to take it. One cannot cross a vast chasm in two small steps."

Breast Reconstruction with Living Tissue

BY CARL R. HARTRAMPH, JR., MD
A Review by M.J. Jurkiewicz, MD, FACS

WHEN THE JOURNAL EDITOR, Charles Underwood, asked me to review Hartrampf's *Breast Reconstruction with Living Tissue*, I immediately accepted with both pleasure and anticipation. Carl Hartrampf is Clinical Professor of Surgery at Emory University School of Medicine and senior partner in a busy group practice, Atlanta Plastic Surgery. He and his group actively participate not only in the graduate education and training of Emory residents in Plastic Surgery who prize the rotation but also in the education of fellows in breast surgery from the continent and abroad.

The book mirrors the man. Its pages reflect authenticity annealed in the crucible of hard-won experience. Discarded are things that do not work. The book is a practical guide to state of the art breast reconstruction with living tissue in women who have had ablative operations in the treatment of cancer of the breast. As Dr. Hartrampf points out, it is a work book intended as a study guide for the surgeon engaged in breast surgery, particularly reconstructive breast surgery using autogenous living tissue to replace the missing breast.

Of 18 chapters in the book of 366 pages, the centerpiece is contained in the 11 chapters devoted to breast reconstruction by a transposition flap of composite tissue taken from a lower abdominal wall donor site — the transverse

rectus abdominis myocutaneous (TRAM) flap procedure. This operation was conceived in the fertile brain of Carl Hartrampf. He designed and developed the procedure working with residents in the anatomy laboratory. It was perfected in the laboratory by detailed studies of the precise vascular anatomy before it was brought to the operating room. This operation introduced in 1982 is the standard by which all breast reconstruction is measured.

Anatomy, physiology of tissue perfusion, preoperative assessment, and intraoperative and postoperative care are thoroughly discussed. Important details are stressed. The operation and its important variations are described clearly, concisely, and thoroughly. Where relevant, certain chapters are enhanced by commentary from experts throughout the country and the world. One outstanding example is the commentary on vascular anatomy provided by G. Ian Taylor of the Royal Melbourne Hospital in Melbourne, Australia whose elegant research into anatomy and perfusion dynamics is widely praised and admired.

The remaining chapters are devoted to the use of other donor sites for various transposition flaps or

free flaps used in breast reconstruction. Again, experts comment on the technique and give their views on the indications and pertinent details of the operation.

The book is illustrated carefully and indeed lavishly, much in color, to enhance the text and its understanding by the reader. Hampton Press did an excellent job in layout, printing, and the reproduction of clinical photographs.

This volume is required reading by all surgeons engaged in breast reconstruction and should be in their personal library. It should serve as an excellent reference volume for all physicians who treat women afflicted with breast cancer.

In the past decade, there has been general acceptance of a fundamental paradigm shift in the management of patients with cancer of the breast. Gone is the radical mastectomy as the standard treatment replaced by much less radical surgery, radiotherapy, adjuvant systemic chemotherapy, and endocrine therapy. Breast reconstruction is a fundamental piece of that change in thinking — to the substantial benefit of thousands of women. Carl Hartrampf, Jr., is to be congratulated for his contribution so forcibly captured in this monograph.

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CALENDAR

MAY

4-8 — *Atlanta: MR-92-02.*

Category 1 credit. Contact Office of CME, Emory Univ Sch of Med, 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

8-9 — *Hilton Head, SC: Pain Management in the Primary Care Setting.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

9 — *Marietta: Women & Heart Disease.* Category 1 credit. Contact Linda J. Cerasa, Program Director, Amer Heart Assn, 1685 Terrell Mill Rd., Marietta 30067-8320. PH: 404-952-1316.

15, 16-17 — *Savannah: Cardiopulmonary Update: 1992.* Category 1 credit. Contact Linda Cerasa, Program Director, Amer Heart Assn, 1685 Terrell Mill Rd., Marietta 30067-8320. PH: 404-952-1316.

18-22 — *Atlanta: Modern Methods of Diagnosing and Treating Diabetes Mellitus and Its Complications.* Category 1 credit. Contact Office of CME, Emory Univ Sch of Med, 1440 Clifton Rd., Atlanta 30322. PH: 404-727-5695.

22 — *Macon: Annual Day of Surgery.* Category 1 credit and AAFP Prescribed credit. Contact Robert C. Fore, Ed.D., Mercer Univ Sch of Med, Office of CME, 777 Hemlock St., Macon 31201. PH: 912-744-1634.

29-30 — *St. Simons Island: Symposium on Blood Lipids.* Category 1 credit and AAFP Prescribed credit. Contact Robert C. Fore, Ed.D., Mercer Univ Sch of Med, Office of CME, 777 Hemlock St., Macon 31201. PH: 912-744-1634.

31 — *Atlanta: Laparoscopic Surgery — 1992.* Category 1 credit 9 hours. Westin Peachtree Plaza Hotel. Contact Jannette Crosby, The Southeastern Surgical Congress, 69 Butler St., #314, 30303. PH: 404-221-0570.

31-June 3 — *Atlanta: Annual Scientific Program & Postgraduate Course.* Category 1 credit 30 hours. Westin Peachtree Plaza, Contact Jannette Crosby, The Southeastern Surgical Congress, 69 Butler St., 3030. PH: 404-221-0570

JUNE

1-3 — *Atlanta: General Surgical Topics.* Category 1 credit 26 hours. Westin Peachtree Plaza Hotel. Contact Jannette Crosby, The Southeastern Surgical Congress, 69 Butler St., #314, 30303. PH: 404-221-0570.

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15-20 — *Kiawah Island, SC: 23rd Annual Internal Medicine Symposium.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

20-25 — *Southampton Princess, Bermuda: Emory Urology Forum in Bermuda.* Category 1 21 credit hours. Contact CME, Emory Univ Sch of Med, 1440 Clifton Rd., N.E., Atlanta, GA 30322. PH: 404-727-5695.

15-28 — *Sea Island, GA: Georgia Chapter of the AAP Spring Meeting.* Category 1 credit 6. Cloister Hotel. Contact William C. Mankin, 4059 Land O'Lakes Dr., Atlanta 30342. PH: 404-237-3922.

JULY

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13-15 — *Kiawah Island, SC: 12th Annual Clinical Obstetrics.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

16-18 — *Kiawah Island, SC: Update in Gynecology.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

20-24 — *Kiawah Island, SC: 14th Annual Critical Care Medicine.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

27-29 — *Kiawah Island, SC: 15th Annual Pediatric Update.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

30-1 Aug. — *Hilton Head Island, SC: Financial Management.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

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The Forging of the Renaissance Physician

Part III: The Physicians and the Period of Rebirth

Miguel A. Faria, Jr., M.D.

A few observations and much reasoning lead to error; many observations and a little reasoning lead to truth.

ALEXIS CARREL

In The Beginning

THE RENAISSANCE was a remarkable epoch in Western Civilization. It was truly an intense period of rebirth which led the way from the scholasticism of the late Middle Ages to the intellectual and scientific achievements of the Age of Enlightenment. The intellectual explosion of the Renaissance affected all areas of learning and human endeavor: sculpture, painting, poetry, writing, philosophy, astronomy, and medicine — all of which were deeply imbued by this revolution in learning.

The early Renaissance dates from Dante Alighieri (1265-1321), the great Italian epic poet and physician, and extended through the time of John Milton (1608-1674).¹ This rebirth in the arts and sciences was more than a revival or rediscovery of the ancient Greek and Roman classics. It brought ideas that formulated new thinking and dis-

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coveries that provided practical innovations which resulted in the betterment of mankind, such as Guttenberg's printing press (1452), which was to prove essential in the dissemination of the new learning and erudition characteristic of the Renaissance.

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Historically, this period witnessed two major events: the discovery of the New World (1492) by the Genoese, Christopher Columbus (1451-1506) sailing for the Catholic monarchs of Spain, Ferdinand of Aragon (1452-1516) and Isabella of Castile (1451-1504); and the fall of Constantinople and the Eastern (Byzantine) Roman Empire to the Ottoman Turks in 1453. Some authorities have even suggested that the influx of Greek scholars from Constantinople into Northern Italy was at least partially responsible for the developments during this period.^{1,2} The Renaissance brought new ideas and doctrines that challenged the old rules and traditional institutions which had dominated European culture and intellectual life for a millennium. Revolutionary discoveries in medicine and astronomy were at last within man's grasp. The Renaissance also witnessed the growth of the humanities and philosophic controversies. This era also was associated with the resurgence of sects (e.g., mysticism) and esoteric cults (e.g., the Kabbala) and even the disreputable "sciences" of alchemy and as-

tology. The formation of new religious and heretical sects, in turn, reactivated the dreaded counterforces of The Inquisition.

The Rulers and Patrons

This was an age when autocratic rulers wrestled and vied for power in a world surrounded by treacherous waters and centered in earthly intrigue. Lorenzo the Magnificent (1449-1492) and the de Medici family ruled Florence. The Church was in turmoil and was led during this time by four of the most powerful, flamboyant, and controversial popes of all times.³ They included Rodrigo Borgia (1475-1507), father of the infamous Cesar Borgia,* who later ascended to the papacy as Pope Alexander VI (Pope; 1492-1503); the de Medici, Giovanni de Medici who became Pope Leo X (1513-1521) and Giuliano de Medici who became Pope Clement VII (1523-1534); and the "fighting pope," Julius II, who brought the great artists to Rome and who was immortalized in Irving Stone's, *The Agony and The Ecstasy*.

This was also the Age of Erasmus (Desiderius Erasmus, c. 1466-1536), the Dutch theologian who translated and commented on Christian writings and who promoted classical scholarship though he never fully joined the upheaval of the Renaissance reformers.¹⁴ This was the time of Martin Luther (1483-1546) and his 95 Theses nailed on the door of the Castle-Church in Wittenberg (1517). This precipitated the Protestant Reformation, and its antithesis, the Counter-Reformation. To the Reformation, the hedonist Pope Leo X himself reacted with utter indifference. Leo was an ardent collector of antiquities and to the end continued the policy of the Sale of Indemnities to procure funds for the completion of the great St. Peter's Cathedral in Rome.³

* He was Niccolo Machiavelli's (1469-1527) protagonist in his book *The Prince* (1513) — the political science classic which is still relevant today.



Figure 1. Henry VIII in 1540 handing Thomas Vicary the Act of Union that established the professional guild of Barbers and Surgeons of London by Hans Holbein the Younger. By permission of the President and Council of the Royal College of Surgeons of England.

In England, it was the time of intransigent rulers such as King Henry VIII (1491-1547), who fortunately yielded to the aspiring surgeons and gave Thomas Vicary the Act of Union charter which consolidated the surgeon's and barber's guild in London in 1540 (purportedly as a reward to Dr. Vicary who had successfully treated his leg ulcer). He was followed by the powerful Queen Elizabeth I (1533-1603) whose navy defeated the invincible Armada (1588) of Philip II (1527-1598) King of Spain. In France, King Francis I (1494-1547) imported Italian Renaissance works of art, founded the College of France (1530) where medicine was taught among other sciences and arts, and repeatedly waged war against the Holy Roman Empire. It was the time of Queen Catherine de Medici (1519-1589), and her husband the King of France, Henry II, and of the Huguenot leader, Henry of Navarre, later King Henry IV (1553-1610), who sacrificed his Calvinist religion for the good of the nation and became one of France's greatest kings. He embraced Catholicism

(1595) to heal the wounds of religious strife and by the Edict of Nantes (1598) granted toleration to as well as political equality for Protestants.¹⁴

France's adversary, the King of Spain, was the greatest of the Holy Roman Emperors, Charles V (1500-1558). He was a capable and devout Hapsburg ruler and his empire stretched from its traditional Germanic limits of the Netherlands and the low countries to the Mediterranean and the New World.¹⁴ In the East, we have one of the ablest rulers to match Charles V in wit and power, the Great Suleyman the Magnificent (1496-1566), Sultan of the Ottoman Empire and ruler of Constantinople.

Fernel, Fracastoro, and the Contagion

During this exalted period, many great medical men dedicated their lives to translating ancient manuscripts and commenting on the newly discovered medical works. Translations of works from the Greek into Latin as well as into the

vernacular languages was performed by Islamic, Jewish, and Christian physicians. Works of Galen, Hippocrates, Plato, and Dioscorides were popularized. Others attempted to reconcile the Humoural doctrines to newly-discovered facts and observations. The word "institute" as well as "synopsis" came into view during this time reflecting the new learning.⁵ The progressive idea of the specific nature of disease came into vogue. The concept of the contagion as material particles** was advanced. Propagation of disease by contact from contagious sources became evident in variola, the bubonic plagues, measles, and syphilis.

The concept of the contagion as material particles was advanced during the Renaissance. Propagation of disease by contact from contagious sources become evident in variola, the bubonic plagues, measles, and syphilis.

Jean Fernel (1497-1588) was one of many celebrated Renaissance physicians. He trained in Paris and compiled his great treatise, *A Universal Medicine*, in which he proposed that the study of medicine be divided into three categories: physiology, pathology, and therapeutics. He summarized all of the known medical knowledge of his time. His book is credited with planting the seeds of curiosity and thirst for knowledge in his contem-

poraries which led to an avalanche of medical theories.

Fernel, along with Paré and Paracelsus, advanced the idea of the contagious nature of diseases by different causes. In 1494, after Spanish troops returned from the New World, there was an outbreak of an epidemic of a new disease in Naples. This disease was subsequently called the French Disease after it became widespread in Europe disseminated by the victorious French troops who had battled the Spaniards in Naples. Mercurials were first used as ointment and found to be effective against this malady, which was later called syphilis.⁵ Paracelsus has been given the credit for this therapy, which has been described by a contemporary as: "spend one hour with Venus and the rest of your life with Mercury..." in reference to its method of transmission and the required long-term treatment.⁶

Giolamo Fracastoro (1478-1553) was another great Renaissance physician who along with Jean Fernel suggested that syphilis was a venereal disease and recommended mercurials for treatment. In 1547, Fracastoro wrote on contagious diseases and separated the bubonic plague from typhus and meningitis while providing excellent clinical descriptions as well as prognosis of these diseases. He believed in transmission by human contact, or by contaminated objects and air.⁵ He was a Renaissance physician in both the modern and historic sense. He even wrote a poem about a shepherd afflicted with syphilis for which he is still remembered.⁷ His treatise on infectious diseases was ahead of its time, and perhaps if it had been pursued further it could have propelled bacteriology into a true science three centuries earlier. He was the forerunner of Robert Koch, Louis Pasteur, Joseph Lister, and Ignaz Semmelweis. Fracastoro was also a proponent of the heliocen-

tric theory proposed by fellow physician Copernicus.

Quarantining those afflicted was found to be an effective way to treat contagious diseases which up through this time had been deci-

Paracelsus blended not only magic with mysticism but also alchemy with medicine. He opposed the medieval reliance on the work of Galen and Avicenna, and instead emphasized observation, experimentation, and empiricism.

inating the populations of Europe and Asia in both sporadic outbreaks as well as in endemic transmission. Hygiene, diet, clean water, disinfection with sulfur vapors, and burial of contaminated bodies outside the city became commonplace during epidemic diseases of the Renaissance. Credit is also due to Baillou (1538-1616) who separated variola from meningoencephalitis, a pestilence which had afflicted the armies of the Holy Roman Emperor Maximilian II.⁵

The theory of specificity of disease promoted by Paracelsus essentially substituted the theory of the "doctrine of signature" which had established that a medicament of nature by its external appearance was endowed by nature with the proper qualities for the treatment of diseases. For example, digitalis was discovered and used for heart ailments because of the shape and form of the leaves of the plant from which it was extracted.⁵ Botany and chemistry flourished in man's search for remedies. Many

** The concept of "animalcule" or living organisms had to wait for the invention of the microscope by Anton van Leeuwenhoek in the 17th century.



Figure 2. Paracelsus (Theophrastus Bombastus von Hohenheim; 1493-1541). By permission of the Musee du Louvre, Paris.

treatises on therapeutics were published encompassing a compilation of all of the known Greek pharmacopeia, and some even included the new Islamic additions. The old "science" of alchemy which had been essentially forgotten in Europe during the Middle Ages was rediscovered and popularized during this time.

The Nonconformist: Paracelsus

The main figure associated with the vivification of Alchemy was the controversial Paracelsus*** (Theo-

phrastus Bombastus von Hohenheim, 1493-1541) of Basel. He blended not only magic with mysticism but also alchemy with medicine.

And controversial he was. A recent author says he came "out of the medieval haze . . . to leap directly into the bright noon of the Renaissance. . . ."⁸ Yet he was said

*** He fashioned himself, Paracelsus ("the equivalent of Celsus"), after the celebrated first century A.D. Roman physician who compiled an encyclopedia of science and medicine including surgical techniques.

to have been censored for teaching in the vernacular, and worse, "he often could be found lecturing roaring drunk in lecture halls . . ." and forever battering the walls of the establishment.⁸

He opposed the medieval reliance on the work of Galen and Avicenna, and instead, he emphasized observation, experimentation, and empiricism. He has been called the Father of iatrochemistry for his application and use of chemistry in the practice of medicine. He challenged the traditional theories of the imbalance of the Humours and the axiom of *Contraria-Contrariis-Curantur*. He vehemently espoused the active intervention of the physician during the crisis of disease. He believed in simple Christianity and the virtues of herbs and drugs as a product of God's creation and affirmed that physicians do God's work.⁹ Paracelsus was a proponent of the modern examination of the urine as opposed to the old misleading science of uroscopy.¹⁰ Perhaps his major achievement is that of his regard for surgery and medicine on an equal footing. In fact, he performed his own surgery and thus he described himself as a doctor in medicine and surgery, helping to raise the status of his surgical colleagues as well as those who practiced both.⁹ There is no doubt that over the last 400 years his name has been rehabilitated****¹¹ as most of the more recently written

**** Conversely, Galen's name and reputation has been in gradual decline since the Renaissance. Nevertheless, the fact remains that Galen showed by experimentation that the arteries in animals contained blood and not air. He described the movements of the heart, and the actions of the valves and the pulsatile forces in the aorta. He came close to describing the circulation of the blood.¹⁴ It was not his fault that this knowledge was lost,¹⁵ and that it was not pursued by his faithful followers until the Renaissance. His errors have been amplified without taking into account the *Zeitgeist* in which he lived and the Dark Ages which followed. The fact that he was not permitted to perform human dissection and had to resort to animal anatomy seems to evade the minds of critics. It's unfortunate that with the advent of modern liberalism Galenic "dogma" has not been judged with the same objectivity and historical perspective as Paracelsian doctrine.

literature about him have emphasized his accomplishments especially in iatrochemistry: the discovery of vitamins, the use of minerals such as arsenic, lead, mercury, iron, as well as tinctures and alcoholic extracts as remedies, etc.^{2,4,9-13} Furthermore, his writings and aphorisms are very much in vogue with recent writers. In fact, some examples of his writings are exemplified in his advice to medical students and, as suggested by Dolan and Holmes^{11,12} may still be applicable today:

Prolix writing has no place in medicine; concise writing and great intelligence, brief treatises but great force — that is the standard by which the physician is measured. The longer the book, the less the intelligence; the longer the prescriptions, the poorer their virtue. Therefore, each physician should achieve great things by means of small things. For nature is so excellent in its gifts that...it better benefits a man to know one herb in the meadow without knowing what grows on it.

It is better to know and to understand one remedy than to rummage through the great libraries of the monasteries, where of a thousand pages barely one is understood...nature does not call for long recipes.

The Genius: Andreas Vesalius

If Paracelsus was the most controversial and impetuous proponent of the new learning of the Renaissance, Andreas Vesalius (1514-1564) was the greatest anatomist of the era. He was the beacon of medical genius in an island surrounded by an ocean of darkness. Along with Paré, the greatest surgeon of the Renaissance, these aforementioned physicians exemplified the spirit of the Renaissance. In his *De Humani Corporis Fabrica* (*On The Fabric of the Human Body*, 1543), Vesalius gave the world one of



Figure 3. Andreas Vesalius at age 28 from his magnum opus, *De Humani Corporis Fabrica* (1543). The World Health Organization, Geneva.

Western Civilization's greatest masterpieces. As professor of anatomy in that university, he had ample opportunity for human dissection and anatomical studies that led to this monumental work. In *Fabrica*, he laid the foundation for modern scientific anatomic investigation. The treatise also for the first time publicly contradicted and corrected previous anatomic concepts established and accepted as dogma

since Galen's time.¹⁶ Though Vesalius revered Galen, he recorded what he saw in his anatomic dissections instead of accepting the inaccuracies and errors contained in the copied and recopied ancient manuscripts. With the publication of *Fabrica*, Vesalius broke with the conventional dogmatic anatomic misconceptions which had gone uncorrected for 1300 years and thus literally revolutionized the field of

anatomy. By actual dissection, Vesalius revealed simple truths that contradicted not only anatomic misconceptions but also philosophic notions. He challenged Aristotle's doctrine that stated that thought and personality were in the heart; Vesalius believed them to be a function of the brain.⁴

Some of the truths that Vesalius revealed by his anatomic works were arrived at by simple observations. For example, he nullified the belief that men have one rib less than women which was assumed by the biblical account of the creation of Eve. Vesalius simply counted the ribs of male and female cadavers in the dissection room and reached the incontrovertible truth. He also debunked the erroneous idea that men have more teeth than women.¹⁷

The illustrations in the *Fabrica* were not only precise and accurate but also genuine artistic masterpieces. Moreover, the illustrations were closely integrated with the text, making the book highly effective. Each body system was described with their organs and their interrelation and function. The chambers of the heart were described, and previous errors corrected (i.e., Galen's orifices between the chambers of the heart based on porcine anatomy were not confirmed).

Nevertheless, the publication of this book led to a violent academic quarrel between the medical establishment headed by one of the Renaissance's great anatomist, Jacob Sylvius (1478-1555) and the young Vesalius. Sylvius followed Galen's teachings, whose anatomy he accepted without reservation, and he could therefore not accept Vesalius's revolutionary findings.⁹ Vesalius's revelations were too much for

the medical world even for this period. The fuming controversy was fortunately ameliorated by his temporary good fortune of being installed as personal physician to the Emperor Charles V, and when the Emperor retired, Vesalius became the physician to his son, Phillip II, King of Spain.

With the publication of *De Humani corporis Fabrica*, Vesalius broke with the conventional dogmatic anatomic misconceptions which had gone uncorrected for 1300 years and thus literally revolutionized the field of anatomy.

Sixtus IV (1414-1484) was the first pope to openly approve human dissection.⁹ When the pious Emperor Charles V asked the faculty at Salamanca about the position of the church on human dissection, he was told that an edict of the church permitted it. Nevertheless, human corpses for cadaveric dissection were difficult to obtain, and body snatching became a necessity even for conscientious anatomists. Consequently, the quest for human corpses for anatomic dissection was such that anatomists were "forced to violate the sanctity of the grave and the threat of excommunication." Vesalius himself recalled one night when he remained hidden outside the city walls and then cut from the gallows the corpse of an executed prisoner to be used

for anatomic dissection. It was said that Cosimo de Medici, Grand Duke of Tuscany, offered Dr. Fallopio two condemned criminals for anatomic work. Allegedly, he told the professor, "kill them in any manner you wish and then dissect them."¹⁷

We also know that anatomic human dissection was common in Venice in 1552 and in Montpellier in 1556. At Montpellier, human dissections had been performed for years and Rabelais himself as a medical student dissected there in 1532.⁵

Vesalius's unhappiness was not to end with his medical controversy but was to culminate with an even greater calamity. The story goes that he was to dissect the corpse of a Spanish nobleman who had died in his care. Allegedly, when he opened the chest, he found that the heart was still beating. Some authorities deny this occurrence as an abominable calumny perpetrated by his many unforgiving enemies.¹⁸ Nevertheless, following this unfortunate event, his life was endangered by the Inquisition. He was saved again by royal favor, and his penitence was to make a pilgrimage to Jerusalem where he lived for many years. He finally decided to return to Padua where he had been offered a professorship, but he never made it back. He was only 50 years old when he died on his return trip on the Greek island of Zakynthos in 1564.⁹ He is now considered the Father of Anatomy and is warmly remembered for his anatomic masterpieces and scientific legacy.

In Part IV immediately following, we will conclude with a discussion of Paré, the Renaissance's greatest surgeon and with other physicians who excelled in fields other than medicine.

Part IV: Physicians For All Seasons

*If I have seen farther, it is by standing
on the shoulders of giants.*

SIR ISSAC NEWTON

Ambroise Paré — Barber Surgeon

CONSIDERED THE GREATEST surgeon of the Renaissance, Ambroise Paré (1510-1590) was born in Laval in Northern France. From his humble beginnings, Paré, the barber surgeon, elevated himself to a distinguished medical/surgical career during the zenith of the Renaissance. He came to be revered by the nobility and peasants alike. He served as personal physician to five successive French kings.

In 1533, at the age 23, Paré went to Paris and trained as house surgeon at Hotel Dieu, the first municipal hospital said to have been founded by St. Landry in 660 A.D.¹ He learned to do cadaveric dissections and was taught by Jacob Sylvius, who had also taught Vesalius at Padua. After completing his training, Paré was certified for the private practice of surgery. His plans to practice were suddenly interrupted, however, when he was recruited by Colonel de Montejan, commander of the French infantry. He left for Northern Italy in the Cisalpine War between the Holy Roman Emperor, Charles V, and the King of France, Francis I. It was subsequently in the battlefields of the various wars between the Emperor and the King of France that Paré was to gain most of his surgical experience and expertise for which he became famous.^{2,3}

It was in the Battle of Chateau de Villane, where the French sustained heavy losses during the siege and storming of the town of Turin, that one of Paré's most celebrated discoveries took place. It was said that he ran out of the boiling oil that was used to neutralize wounds contaminated with gunpowder (which was thought to be poison-

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ous*****). He improvised by applying a salve of egg white, rose oil, and turpentine.***** The next morning, he found that those soldiers who had been treated with the salve spent the night well and experienced less pain and inflammation, whereas those treated with the boiling oil experienced fever, aches, and swelling about their wounds. From then on, Paré felt that it was "cruel to burn poor people who had suffered shot wounds."⁴

Paré abandoned the surgical instructions then in vogue by the authoritative Giovanni de Vigo, a papal surgeon who taught the traditional idea that gunshot was poisonous and thus recommended cauterization of gunshot wounds. During this time, he not only tended wounds but also drained abscesses and reduced fractures.

After serving 2 years with distinction as military surgeon, Paré was allowed to return to Paris. He bought a comfortable home on the

Left Banque near the Pont St. Michel. He was married twice and had several children, none of which survived infancy.

In 1541, Paré joined the College of Barber Surgeons after passing its entrance examination. He wrote a dissertation on gunshot wounds that was used for the treatment of wounds in subsequent wars. He created an uproar, however, by insisting that gunpowder was not poisonous and that cautery by boiling oil in the treatment of wounds was harmful. In 1549, he wrote another book based on the anatomic dissections of Vesalius whom he greatly admired. In 1561, *Universal Surgery* followed, describing further refinements in surgical principles and techniques.⁵

Paré's surgical successes lead to fame and fortune but not to peace and tranquility. After King Francis I died in 1547, there were a few years of peace between Emperor Charles V and young King Henry II, son of Francis I. Paré was soon summoned for further service to his country. At the siege of Metz, he practiced trephination for head wounds and perfected his technique of amputations. Despite the rigors of war and the muddy and bloody circumstances of the battlefield, he remained committed to the care of his soldiers. He was obsessed with cleanliness and sanitation and even prescribed dietary regimes of hyperalimentation for the wounded.¹

On Christmas Eve, 1552, Emperor Charles V finally gave up the siege of Metz complaining to his aids that "fortune is like the woman, she prefers the young king to the old emperor." Paré returned to Paris and was rewarded handsomely by the King with 300 gold crowns.⁶

Within months after Metz, Paré

***** Since the introduction of gunpowder from China to the West during the middle of the thirteenth century, gunpowder was thought to be poisonous and aggressive treatment was deemed necessary for those shot in the battlefield.¹

***** Turpentine has been shown to be a bacteriostatic agent for certain bacteria i.e. *Escherichia coli*.¹

was in another besieged town, Hesdin, where the situation was so hopeless for the French army that Paré, as an officer, voted with the majority to surrender. He was imprisoned and obliged to treat the leg ulcers of his captor, Lord Vaudeville (1553). After an arduous but successful ordeal, Paré was released by the Knight and rewarded for his treatment with a trumpet-blowing escort to the camp of Henry II.⁶ Paré was subsequently appointed "Surgeon In-Ordinary" to the King, but he resented that he was no more than a Master Barber Surgeon in professional circles. This situation was corrected in 1554, when he passed a rigorous examination and was granted a license as a member of the confraternity of St. Côme.*****

In his capacity as royal physician, Paré was invaluable to the reigning King of France. It was Charles IX, King of France, who protected Paré by hiding him in his own bed during the infamous Huguenot's massacre that took place on St. Bartholomew's day on August 24, 1572.¹³ The massacre was orchestrated by the Queen Mother, Catherine de Medici, and perpetrated by Paris mobs on the occasion of the celebration and congregation of Huguenot leaders for the wedding of Henry of Navarre, the protestant leader.

Paré was also present at the tournament of St. Quentin that took place in June of 1559, when King Henry II requested and insisted on a joust with Comte of Montgomery, Captain of the Scottish Guard, in



Figure 1. Engraving of interior of Hôtel-Dieu, Paris (c.1500). A variety of treatments and the sewing of shrouds on corpses are seen in full view of other patients. Courtesy of The Bibliotheque Nationale, Paris.

which the King was mortally wounded.¹ Paré was consulted amongst other surgeons (including Vesalius who was sent from Brussels by King Phillip II of Spain). Destiny had the last word. Henry died and his children (with Catherine) had short unhappy ends: Francis II, husband of Mary Queen of Scots, died young; Charles IX died at age 24 presumably of tuberculosis (1574); and Henry III, Paré's "fifth King," was stabbed by a demented monk in St. Cloud in 1589.

For 30 years, Catherine ruled the affairs of state in France. With the accession of Henry of Navarre as Henry IV, civil war intensified, and Paris rose in full rebellion against the Protestant King. The siege of Paris was led by the stubborn Archbishop of Lyons. At 80 and toward the end of his life, Paré was able to persuade the Archbishop to surrender and end the civil strife that was ravaging France. Henry's triumphant entry into Paris ended the religious wars. The King converted to Catholicism and to pacify the populace is said to have retorted, "Paris is worth a mass."

Paré like Vesalius waged war against obsolete methods of treatment even when he had to go against the medical establishment.² Paré's magnum opus was his *Les Oeuvres* (Collected Works: first edition, 1575) which was published at age 65. In his *Works*, he described techniques for bladder operations, artificial eyes and limbs, the suturing of wounds, and other innovative surgical procedures which were described and illustrated in considerable detail.¹⁻⁹ His *Works* went through several editions. In one of the later editions, he got into trouble for not asking permission to include information from the Parisian medical society. He also offended the Establishment for vehemently condemning the use of "unicorn's" horn and tissue from Egyptian mummies as pharmaceuticals.⁵ He went on to describe prostatism as a cause of painful urination, and the effects of syphilis on arterial walls including the development of aneurysms. He showed midwives how to stop puerperal hemorrhaging. He advocated prompt caesarean section as soon

***** In addition to the physicians and the barber-surgeons, there was in France the Confraternity of St. Côme (later to become the Royal College of Surgeons) whose members were designated *Master Surgeons*. This confraternity had been in perpetual conflict with the physicians who frequently sided with the subservient barber-surgeons to oppose the Master Surgeons. Paré was recruited by the confraternity with the backing of the King and was licensed in 1554 as Master Surgeon. Though Paré's Latin was inadequate, he was recognized not only because of his popularity but also because of his surgical knowledge and his great surgical skills.

as the mother died to save the baby, and conversely, urged abortion to remove a dead fetus from a living woman.¹⁰ He popularized the use of truss in the management of hernias.

Paré was also a man of great insight and great common sense, as for example when he requested that a soldier's body be put in the same posture as when he was shot by a musket ball to assess the trajectory of the projectile's path and then palpating the bullet and removing it.

In regard to medicolegal reports,^{11,12} Paré writes:

DEADLY WOUND. I, Ambroise Paré, have gone today on the order of the court of parliament to the house of X, Rue St. Germain with the ensign of S, and have found him in his bed having a wound on the left part of his head over the temporal bone with fracture. Several parts of this bone have broken through the two membranes and entered the substance of the brain. Therefore, the above-named had lost all consciousness with a convulsion, the pulse is very small, and the sweat cold. He neither drinks nor eats. I, therefore, certify that he will soon die. Testified by my seal, etc.

ABDOMINAL WOUND RESULTING IN ABORTION. I, Ambroise Paré, have come on the order of the great Provost to the Rue St. Houbre, to the house of Mr. M., where I have found a lady called Margaret in bed with a high fever, convulsions, and hemorrhage from her natural parts, as a consequence of a wound that she has received in the lower abdomen situated three fingers below the umbilicus, in the right part, which has penetrated into the cavity, wounded and penetrated the uterus. She has therefore delivered before term a male infant, dead, well formed in all its limbs, which infant has also received a wound in its head, penetrating



Figure 2. Ambroise Paré at age 68. Woodcut (c.1561). Courtesy of The New York Academy of Medicine Library, New York.

into the substance of the brain. Therefore, the above-named lady will soon die. Certified this to be true in putting my signature, etc. With this attention to detail, Paré was a forerunner of medical jurisprudence.

Perhaps his greatest single contribution was to introduce the use of ligatures for controlling hemorrhag-

ing during surgery, which was one of the worst surgical problems of his day. Until then, the sole means of to stop bleeding was the cautery iron which had been used extensively by Arabian physicians. Responding to the inquisitorial interrogation of the Parisian medical society, Paré said, "You say that tying up the blood vessels after an

amputation is a new method, and should therefore not be used. That is a bad argument for a doctor.⁵

Because of his advances in the discipline of surgery during the Renaissance, as well as his indomitable moral courage and great technical skills, he has been deservedly called "the Father of Modern Surgery."⁹ Near death, Paré bequeathed to his family, "his wealth, property and honor" and to his profession "a burning against mystification and the Ivory Tower."⁶ Some aphorisms ascribed to Paré's include: "I bandaged him but God cured him", "It is better to prescribe a dubious drug than to leave the patient without help", and "Always give the patient hope even when death is near."⁵

Other Contributors to the Rebirth

Other important developments in medicine during the Renaissance include the bougies for strictures of the urethra (1541) and suprapubic cystostomy (1560).¹³ The Renaissance also disproved the theory of *Ordinary Induction* which in essence said that the application of anatomy and physiology from animals to man may be assumed without verification. ***** The work of Andreas Vesalius, as we have seen, and Michael Servetus (1511-1553) nullified the erroneous anatomic assumptions based on animal dissections which had gone uncorrected for centuries. Servetus, a Spanish physician and priest, speculated that blood was transferred from arteries to veins during passage through the lungs and discovered that it changed color during this passage. Servetus was later

***** In fact the argument goes on today in a different setting i.e. the significance of teratogenesis and carcinogenesis produced in laboratory animals with the administration of pharmacologic rather than physiologic doses of drugs and the induction or extrapolation of this information from animals to humans. Even in this day and age of scientific experimentation, it has taken us considerable human effort, money and experimentation to again disprove what our predecessors had already demonstrated during this period.

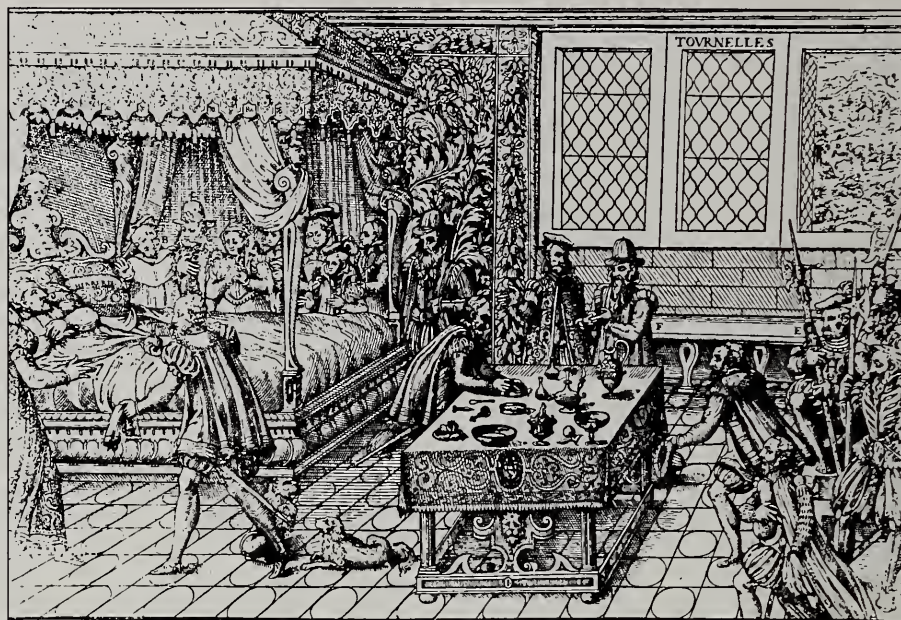


Figure 3. The death bed of Henry II of France in 1559. Vesalius and Paré are both shown right of center. Queen Catherine and the royal children are on the bedside surrounding the moribund King. Woodcut (c.1560). Reproduced with permission of The National Library of Medicine, Bethesda.

burned at the stake in Geneva for his heretical doctrine of the Holy Trinity. In fact, it was said that the Inquisitors used green wood to prolong his agony.¹⁴

It was during this period that the basis for the theory of the general circulation was established opening the way for William Harvey (1578-1657; *De Motu Cordis*, 1628).

Fabricius De Aquapendente (1537-1619), another professor of anatomy at Padua, discovered the valves in the veins (1572) and hinted at some knowledge of the circulation. It was he who inspired his student William Harvey to learn about blood circulation. Andreas Caesalpinus (1524-1603) also studied the heart and lungs, as well as the arteries and veins, and came close to discovering the general circulation (1571).

We should also mention Gabriello Fallopio (1523-1562) and Bartolommeo Eustachio (1520-1574), two anatomists who were said to have initially ridiculed Vesalius but eventually joined his ranks.

Their eponyms for structures that still bear their names attest to their stature as Renaissance physicians. Moreover, Dr. Fallopio is credited in his *De Morbo Gallico* published in 1564 with the first description of a condom. The device was introduced as prophylaxis against syphilis¹¹ during the restoration period in England (1660) — a time of relative sexual permissiveness following the puritanical rule of Oliver Cromwell.

Lastly, let us consider the first successful documented case of a caesarean section on a living woman. ***** It was performed not by a physician but by a sow gelder (some assert he was a butcher) named Jacob Nufer who lived in the German village of Siger-shufen.^{5,10,11} He controlled the bleed-

***** The word Caesarean or Cesarean supposedly derived from Julius Caesar who was said to have been delivered from his mother's womb in this fashion. Nevertheless, his mother Aurelia was still alive, and admired as a model of a Roman matriarch, when the Roman statesman was forty-eight years old and at the pinnacle of his career. The operation up through the Renaissance was performed only on dead mothers to save the baby.

ing with hot irons as was commonplace at the time. This first caesarean section (1500) was an isolated, individual act of desperation that miraculously succeeded. Even in the hands of skilled surgeons, the mortality rate for this operation remained extremely high (86-100%) and therefore out of the reach of most surgeons until the 19th Century.

The Physician as Scholar, Poet, and Occultist: Copernicus, Rabelais, and Nostradamus

Some Renaissance physicians managed to engage in other activities as well as practice medicine. Some excelled in these other activities and achieved even greater fame because of it. Foremost among this group of physicians was Nicolaus Copernicus (1473-1543). A Polish physician, he was also an astronomer who revolutionized the theories of celestial motion. Busy as he was practicing medicine (he helped combat a plague epidemic in Warmia¹⁷ in 1519), Copernicus found time to make celestial observations and to formulate a theory of planetary motions.¹⁵

In his *Revolutions Of The Heavenly Bodies* (1543), he refuted the theory of Claudius Ptolemy (second century A.D.) which had gone unchallenged for over a millennium. He proposed instead his heliocentric theory of the solar system. Ptolemy's fixed but complex mechanical world gave way to an old concept which had been forgotten since classical Greece. Copernicus' theory took Earth from its central position and revolutionized astronomy.^{8,14,16,17}

Copernicus lived to see a copy of his magnum opus only on the day of his death,¹⁷ May 24, 1543, but confirmation of his theory had to wait until Newton's *Principia* in 1687.

Francois Rabelais (1494-1553), priest and physician, earned his medical degree at Montpellier,

a center for learning which together with Salerno was the hub of learning in the late medieval period. He lectured there in anatomy and human dissection, and translated Greek to Latin.¹³ He also wrote bawdy satires and commented on the aphorisms of Hippocrates (Lyons, 1532). The erudite Rabelais also wrote satirical tales including *Pantagruel* (1532) and *Gargantua* (1534) attacking contemporary society and mocking the contemporary rules of conduct. He thus anticipated Moliere in the derision of ideas and institutions of the times.⁸

Paré created an uproar by insisting that gunpowder was not poisonous and that cautery by boiling oil in the treatment of wounds was harmful.

Lastly, this dissertation would not be complete without mentioning Michel de Nostradamus (1503-1566). A French physician of Jewish descent, Nostradamus was born in the town of St. Remy to a family well versed in science and mathematics. He took humanity courses in Avignon and attended medical school in Montpellier, graduating "with great *eclat*."¹⁸

Originally intending to practice medicine, Nostradamus' life took a different direction when the plague of 1546 took the lives of his wife and two children. After their deaths, he spent 3 years treating and attending other plague victims. The town of Aix was so grateful to him, it presented him with a pension.

After he remarried and resettled in Salon de Craux, he became more secluded and began to have mystic experiences. These experiences

culminated in visions of the future. He wrote these prophecies in the form of *Quatrains* which were short four-line verses composed in an enigmatic form during periods of solitude. It was his belief that astrology and medicine were intertwined.

Nostradamus became occult consultant to the ubiquitous and powerful Catherine de Medici (whose personal physician, incidentally, was Jean Fernel). He gained the favor of both the queen and king, Henry II. He was bestowed with great fame after he predicted the death of Henry II (in itself a very dangerous act) in a celebrated quatrain (1558). Henry II died in 1559 after the injury that was predicted by Nostradamus.¹⁸

The young lion shall overcome the old on the field of war in a single combat (duelle); He will pierce his eyes in a cage of gold. This is the first of two lappings, then he dies a cruel death.

The king was killed accidentally in the joust during the tournament of St. Quentin. The lance of his younger opponent pierced his head gear, blinding him in one eye and mortally wounding him. Nostradamus also predicted the tragic fates of the three royal princes. Eventually, he presaged his own time and date of death, on July 2, 1566.^{18,19}

Epilogue

The explosion of ideas during the Renaissance created tidal waves of expanding knowledge that poured over the world for the next 300 years. These waves of knowledge flowed naturally into the Age of Reason and the Enlightenment. In the 19th Century, two of the greatest accomplishments in medical history occurred: the germ theory of disease and the discovery of general anesthesia. These advances were essential steps for the forthcoming and even greater achieve-

ments of scientific medicine in the 20th Century.

As we have seen, the Renaissance was a giant step forward in the acquisition of medical knowledge, but within the context of medical history, it represented the placement of just one of the blocks (albeit a giant one) in building the pyramid of medical knowledge. From the intuitive medicine of primitive society to the scientific medicine of today, the Renaissance represented a spectacular moment.

Are there any lessons that we can learn from the Renaissance that can be applied to the present state of affairs in the field of medicine? Certainly, in view of the seemingly insurmountable obstacles that the medical profession faces today, it is imperative that we look at our past for lessons that might be learned to prevent making old mistakes.

Perhaps it is to our advantage to be as bold and resourceful as our medical forefathers to confront the problems of our own Age. An ever expanding, powerful federal government, escalating health care costs, large segments of our population which are uninsured or underinsured, the tarnished image of our profession, and the adversarial, litigious climate in which we physicians are compelled to practice — are all serious challenges which are threatening to destroy the private practice of medicine. Nevertheless, these challenges must be confronted with courage, ingenuity, and perseverance.

If this paper points to one salient fact, it is that medicine is a marriage of art and science. The public, the media, and the government must recognize that even in the foreseeable future, physicians are not going to obtain 100% perfect results, ameliorate the human condition in every instance, or stop the pain of every soul that knocks on our door. With compassion, however, we can

try our best. Thus, as we face the array of forces arraigned against medicine, we must garner all of our resources, energy, and intellect to preserve what is good and to correct the deficiencies. It will take truly Renaissance physicians of the highest order and courage to surmount the hurdles in our path.

I hope that if anything, this history will be an inspiration for the reader to look within for his or her own Renaissance consciousness. We need this inspiration to guide us safely through the troubled waters in which our noble profession is immersed.

Acknowledgment

My thanks go to Drs. C.E. Bagwell and E. Bendiner for their papers which contained invaluable information on Paré in the battlefield, to Mrs. Faye Frazer, Media Services, Mercer University School of Medicine, for making the medical illustrations in this work, and to the Mercer University Medical Library staff for their assistance in the literature search.

I am also indebted to Ms. Susan T. Johnson, Managing Editor, for her editorial assistance and useful suggestions.

References — Part III

1. Brinton C, Christopher JB, Wolff RL. A History of Civilization. New Jersey, Prentice Hall, Inc, 3rd Ed, 1976.
2. Lyons AS, Petrucelli RJ. Medicine: An Illustrated History. Rawls W (ed), New York, Harry N. Abrams, Inc, 1978.
3. Chamberlin ER. The Bad Popes. New York, Dorset Press (1st Ed, 1969), 1986.
4. Harvey D, Fehrenbacher DE (eds). The Illustrated Biographical Dictionary. New York, Dorset Press (3rd ed), 1990.
5. Cumston CG. The History of Medicine. New York, Dorset Press (1st Ed, 1926), 1987.
6. Singer A. Letter to the Editor. J Med Assoc Ga 1991;80: 333.
7. Prindle RF. Disinfection — Yesterday and today. Res Staff Phys 1977;100:1s-11s.
8. Bendiner E. From barbershop to battlefield — Pare and the Renaissance of surgery. Hosp Pract August 1983;193:225.
9. Haeger K. The Illustrated History of Surgery. JV Leuven, (ed and transl), New York, Bell Publishing Co., 1st Ed, 1988.
10. Bloch H. Paracelsus: resolute Renaissance pioneer. South Med J 1986;79:1564-1566.

11. Dolan JP, Holmes GR. Some important epochs in medicine. South Med J 1984;77:1022-1026.

12. Jacobi J (ed), Guterman N (transl). Paracelsus: Selected Writings. New York, Pantheon Books, 1951;57-58.

13. Pagel W. Paracelsus. New York, Karger (2nd Ed), 1982.

14. Osler W. The Evolution of Modern Medicine — Galen's Written Works. Lecture delivered at Yale University on The Silliman Foundation, April 1913. New Haven, Conn., Yale University Press, 1921. JAMA 1988;260:3182.

15. Galen. Galeni Pergameni Omnia quae Extant, in Latinum Sermonem Conversa. In, Gesnes C (ed), Basel, Frobenius, 1561-1562.

16. Vesalius A. De Humani Corporis Fabrica Libri Septem, Basel, Oporinus, 1543.

17. Newman A. The Illustrated Treasury of Medical Curiosa. New York, McGraw-Hill Book Co., 1st Ed, 1988.

18. Spector B. One hour of medical history — Selected excerpts. Surg Neurol 1990;33:64-73.

References — Part IV

1. Bagwell CE. Ambroise Paré and the Renaissance of surgery. Surg Gynec Obstet 1981;152:350-354.
2. Bloch H. Ambroise Paré (1510-1590): Father of Surgery as art and science. South Med J 1991;84:763-765.
3. Paget S. Ambroise Paré and His Times (1510-1590). New York, Putnam's, 1897.
4. Paré A. Method of Curing Wounds by Gunshot. Hammond W. (transl), London, Laggard, 1617.
5. Haeger K. The Illustrated History of Surgery. JV Leuven, (ed and transl), New York, Bell Publishing Co., 1st Ed, 1988.
6. Bendiner E. From barbershop to battlefield — Pare and the Renaissance of surgery. Hosp Pract August 1983;193:225.
7. Lyons AS, Petrucelli RJ. Medicine: An Illustrated History. Rawls W. (ed), New York, Harry N. Abrams, Inc, 1978.
8. Harvey D, Fehrenbacher DE (eds). The Illustrated Biographical Dictionary. New York, Dorset Press (3rd Ed), 1990.
9. Spector B. One hour of medical history. Selected excerpts. Surg Neurol 1990;33:64-73.
10. Houtzager HL. Cesarean section till the end of the 16th century. Europ J Obstet Gynec Reprod Biol 1982;13:57-58.
11. Newman A. The Illustrated Treasury of Medical Curiosa. New York, McGraw-Hill Book Co., 1st Ed, 1988.
12. Ackerknecht EH. CIBA Symposia, CIBA-GEIGY Corporation, 1950.
13. Cumston CG. The History of Medicine. New York, Dorset Press (1st Ed, 1926) 1987.
14. Brinton C, Christopher JB, Wolff RL. A History of Civilization. New Jersey, Prentice Hall, Inc, 3rd Ed, 1976.
15. Copernicus N. De Revolutionibus Orbium Coelestium, 1543.
16. Sliwinski M. Doctor Copernicus. World Health 1973;12-15.
17. Miller JM. Copernicus, medicine, and the heliocentric concept. South Med J 1983;76:1167-1168.
18. Nostradamus M. Prophecies (1558). Basel and reproduced in New York. Avenel Books, Crown Publishers, Inc, 1980.
19. Cohen D. The Encyclopedia of the Strange. New York, Dorset Press, 1985;143-152, 205-213.

A National Resource — A State Treasure

Paul E. Peach, MD, Kay Williamson, Diane Blanks

The impetus initially established by FDR continues today in Warm Springs through adaptation of principles originally applied to paralytic polio and through expansion to medical rehabilitation of other disorders.

IN 1927, FRANKLIN DELANO ROOSEVELT, with two-thirds of his personal fortune, established the Georgia Warm Springs Foundation. From this extraordinary financial and personal commitment evolved one of the premier rehabilitation facilities in the world dedicated to the treatment of poliomyelitis and its sequelae.

Many treatment techniques for patients recovering from poliomyelitis and other paralytic disorders were subsequently developed at Warm Springs. Likewise, numerous orthotic designs and principles were also developed at the facility, many of which continue to be used today by medical professionals.

By the early 1960s, paralytic poliomyelitis was largely eradicated in the United States as a result of national vaccination programs. An ongoing commitment to innovation and excellence continues at the facility, now known as the Roosevelt Warm Springs Institute for Rehabilitation (RWSIR), in the treatment of many other paralytic disorders. In addition to patients in Georgia, the Institute serves patients from throughout the United

States as well as from other countries.

Additionally, the research and innovation that were hallmarks established many years ago when the facility was primarily a treatment center for poliomyelitis continue into many pertinent areas today. Because of the unique experience developed in Warm Springs, the facility has continued to serve as a resource for other rehabilitation

facilities in establishing their own programs.

Presently, the Institute also maintains the state's central registry for spinal cord injuries and traumatic brain injuries. The impetus established initially by FDR continues unabated today in Warm Springs through adaptation of principles originally applied to paralytic polio and through expansion over the years to medical rehabilitation of other disorders. Thus, in many respects, this facility continues as a unique resource that might well be the envy of those inside and outside the state of Georgia.

The Team Concept

The first medical team concept began in 1933 with only three members: a physician, a physical therapist, and a registered nurse. Today, the Institute provides an interdisciplinary team approach throughout the facility. Through coordinated management by a board-certified rehabilitation medicine specialist and the specialized team members, the team optimizes the functional outcome of patients who have sustained catastrophic functional de-

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Figure 1. The hand function of a patient who sustained injury to his spinal cord in a diving accident is evaluated by James B. Knowles, MD.

cline due to their disabilities. In order to achieve this, team members routinely address the patient's medical, physical, social, cognitive, psychological, economic, and vocational needs.

The Medical Rehabilitation Unit

From its inception, RWSIR dealt with the comprehensive needs of persons with disabilities. In the first year of operation, 1927, a total of 61 patients were served in the medical unit. Today, the Roosevelt Institute annually provides inpatient medical rehabilitation programs for more than 600 persons. The medical rehabilitation unit, licensed for 132 beds and with full accreditation by JCAHO and CARF, provides comprehensive rehabilitation services for patients with spinal cord injuries (Figure 1), strokes, traumatic brain injuries, multiple sclerosis, Guillain Barre syndrome, arthritis, amputations, work-related injuries, and a variety of other paralytic and orthopedic disorders.

Physician-directed interdisciplinary teams include members from rehabilitation nursing, occupational therapy, physical therapy,

neuro-psychology, speech-language pathology, audiology, respiratory therapy, psychology, social work, recreational therapy, orthotics/prosthetics, driver education, chaplaincy, dietary and medical care from the facility's staff physicians, and numerous medical specialty consultants. Staff medical consultants include urologists, neurologists, orthopedists, internists, radiologists and others.

Head Injury Rehabilitation Program

In 1985, the Roosevelt Institute implemented a unique program serving persons who had sustained traumatic brain injuries. The CARF-accredited head injury rehabilitation unit provides a 15-bed acute medical rehabilitation program designed to maximize residual abilities and enable the patient to achieve optimum independence in daily living. The interdisciplinary team develops an individualized treatment plan for each patient to assist him or her in achieving a maximum level of functioning in physical, cognitive, psycho-social and vocational skills. Since its inception, the head injury program

has provided services to more than 2,000 inpatients and outpatients.

Many patients who have sustained closed head injuries are often left with a combination of cognitive, perceptual, motor, and sensory deficits. An inpatient therapy program for these patients consists of treatment by a team of allied health specialists consisting of physical therapy, occupational therapy, speech therapy, psychology, neuropsychological evaluation, rehabilitation nursing, activity therapy, and others.

One patient treated in this program presented with a right hemiparesis, with increased tonic, right sided neglect, visuospatial perceptual deficits and impaired sitting balance. Figure 2 shows this patient being treated by an occupational therapist addressing several concurrent objectives. Through the patient's manipulation of the pegs a number of therapeutic objectives are being addressed. The affected spastic right arm has been positioned in an antispastic position and is weight bearing on the sitting

The Brace Shop, as the Institute's early orthotics department was called, created the first hand controls for President Roosevelt's car. Today the department provides a wide range of medically prescribed items totaling more than 6000 annually.

surface, resulting in increased proprioceptive input. This position additionally promotes improved sitting balance. The left nondominant hand is also being conditioned and



Figure 2. An Institute occupational therapist instructs a patient in an activity to facilitate proprioceptive input with graded resistance while achieving symmetrical weight-bearing in dynamic sitting.

trained to substitute for the affected contralateral upper extremity. Additionally, the task requires crossing to the right side which, with sufficient reinforcement, will minimize this patient's right sided visual neglect.

Orthotics and Prosthetics

The Brace Shop, as it was originally known, began in 1929 with the pioneering of many adaptive aids and orthotic devices. It created the first hand controls for President Roosevelt's car, enabling him to drive area roads independently. Today, the orthotics and prosthetics department provides services to inpatients, outpatients, and in rehabilitation programs totaling in excess of 6000 pieces of equipment annually. It provides a wide range of medically prescribed items including corsets, back braces, splints, leg braces, modified

shoes, wheelchairs, prostheses, and hundreds of adaptive devices. The prosthetic clinic meets three times monthly, providing patients with a broad range of prosthetic devices with individualized assessment that utilizes the most current technology to optimize function and comfort.

The availability of adaptive keyboards and computerized assisting devices allows patients with a diverse range of disabilities to enhance communication, mobility, and to operate environmental systems. For example, patients with impaired fine motor control (from cerebral palsy or traumatic brain injuries), can benefit from an enlarged keyboard which opens communication and expands functional opportunities otherwise unobtainable (Figure 3). On the other hand, patients with severely limited range of motion (such as

patients with quadriplegia), can obtain similarly enhanced function with a mini keyboard. Additionally, numerous switching devices are available which allow computer accessibility through chin, head movements, or even eyebrow movements, as well as a number of other methods. These switching devices are also often adapted to electric wheelchair controls to improve a patient's independence in ambulation.

Outpatient Services

Outpatient services have been a vital part of the Institute since 1955. This department's philosophy is to provide maximum service with minimum inconvenience to patients. Over 7,000 outpatient visits are made annually. This department serves both former patients and newly referred patients who do not need hospitalization. In addition, the clinic offers a wide variety of multidisciplinary specialized clinics and services including post-polio, amputee, seizure, muscular dystrophy, low vision, and seating/mobility clinics.

Seating Clinic

All patients who have spinal cord injuries or other neuromuscular impairments should have individualized evaluations to optimize their level of mobility and independence and to minimize the likelihood of secondary complications, such as pressure sores and musculoskeletal deformities. One example of these secondary sequelae is illustrated by one patient who had sustained a complete spinal cord injury at the T8 level 18 years prior to presenting at the Seating Clinic. In the intervening period since his original injury, this patient had experienced numerous pressure sores, undergone multiple flap surgeries, and ultimately had a hip disarticulation amputation of his right leg. Additionally, severe rotoscoliosis had developed.

When initially seen, he was un-

able to balance himself because of the severe rotoscoliosis and the amputated leg without resting his elbows on the wheelchair arm supports. Consequently, he was unable to propel his manual wheelchair independently. Additionally, his wheelchair cushion was totally inadequate, and he was at great risk for developing additional pressure sores.

The patient was first placed in a seating simulator in which his body contour was vacuum molded. From this impression, a custom posture and seating support was fabricated and integrated into his manual wheelchair. With this resulting system, his sitting balance was stabilized, allowing him to propel his wheelchair independently with his freed hands. Additionally, with the total contact body support provided with the new seating system, the potential for development of future pressure sores was substantially minimized.

Post-Polio Syndrome and Post-Polio Clinic

Post-polio syndrome is characterized by the appearance of new weakness, fatigue, and muscle and joint pain in patients who have recovered from the initial acute poliomyelitis attack. These symptoms usually occur more than 20 years later. In the intervening period, these patients have been functionally and neurologically stable. While initial estimates had placed the number of polio survivors likely to experience these symptoms at 25%, more recent studies have revised this number upwards to 60%.

The etiology for this syndrome has not been definitively ascertained, but the most commonly held opinion is that chronic physiologic overuse on the surviving motor units is the primary precipitating factor. In many instances, chronic joint and muscle stressors also play a role. Unfortunately, no pathognomonic test has been found to assist in the diagnosis of this syndrome,

and at present, the diagnosis is made clinically.

Fortunately, the prognosis for improvement in symptoms and prevention of further functional decline is very favorable once appropriate interventions are undertaken to attenuate chronic overuse patterns. Typical of these interventions include reduction of physical activities, use of orthotics, rest breaks, and lifestyle modifications.

The prognosis for improvement in symptoms of post-polio syndrome and prevention of further functional decline is very favorable once appropriate interventions are undertaken to attenuate chronic overuse patterns.

In a study recently published of patients treated in the Institute's post-polio clinic, the results strongly indicated that in patients who control overuse patterns, these symptoms either improve or resolve, and further, that the progressive deterioration in muscle strength is halted. Similar findings had also been reported anecdotally in other post-polio clinics prior to the publication of this study.

Polio patients initially evaluated at the clinic are evaluated by multiple personnel over a 2-day period. In addition to a comprehensive medical evaluation, each patient is administered a pulmonary function test and a detailed manual muscle test by a registered physical therapist with specialized training in this technique. Referrals to occupa-

tional therapy, orthotics, psychology, speech therapy, physical therapy, cybex muscle testing, and to other medical specialists are made on an individualized basis. Once the evaluation has been completed, the results of the evaluation are sent to the referring physician. Many patients are seen in follow ups, and management is coordinated with their referring physicians.

Outpatient Satellite Clinics

To facilitate patient access, the Institute has established monthly outpatient satellite clinics in five areas of the state. These clinics, located in Rome, Atlanta, Statesboro, Tifton, and Waycross, provide evaluations for Institute admission and follow-up services for former patients in cooperation with the patients' local referring physicians. Each clinic is staffed by a Roosevelt Institute PM&R specialist, a rehabilitation nurse, an orthotist, and a rehabilitation physical therapist.

Vocational and Independent Living Services

In addition to the services provided in the medical unit, the vocational and independent living programs annually provide services to over 500 students with disabilities (Figure 4). Students participate in a wide spectrum of programs including vocational evaluation, vocational preparation, adult literacy, preparation for general education diplomas, home and personal management, work adjustment, and interpersonal adjustment. Specialized programs are also available for visually and hearing impaired people and for people with traumatic brain injuries who are making the transition from medical to vocational rehabilitation.

The 6-week independent living program provides persons who have severe physical disabilities with the skills, knowledge, and information they need to be as independent as feasible. Topics cov-



Figure 3. Patients at the Roosevelt Institute can access computers through a variety of switching devices chosen specifically to fit their disabilities. Alternative systems can open many avenues for educational and vocational endeavors.

ered in classroom segments relate to housing and attendant needs, consumer activism, sexuality, financial planning, mobility, medical needs, and social relationships. Ideally, participants have completed a medical rehabilitation program and have reached their maximum physical fitness. The majority of students in this program have spinal cord injuries, with the balance representing a wide range of mobility impaired disabilities.

Support services with medical and psychologic referral and therapeutic recreation are also provided. These services are designed to assist individuals in living more independently, obtaining and maintaining employment and being able to function more successfully in the community.

Conference and Continuing Education Center

In 1939, the Institute offered educational programs for the children

who were hospitalized. Today, the conference and continuing education center has evolved to meet the needs of the larger rehabilitation community. The Institute offers professional training seminars, conferences, consultation, and information exchange to agencies and individuals in rehabilitation. Affiliations and internships in the medical, vocational, and recreational rehabilitation fields are also offered through a number of universities and colleges throughout the country.

Camp Dream

Since the early years, the community has been vital to the realizations of the Institute's goals and philosophy. Through a public-private partnership with the Georgia National Guard, the Army Reserves, and the Georgia Jaycees, a wheelchair-accessible outdoor recreation site has become a reality. The 15-acre lake and surrounding land

will serve as the setting for a camp area for children and adults with disabilities. The camp buildings, for which the Jaycees and the Institute are currently raising funds, will include several cabins, a pavilion, pool, boat docks, dining facility, and therapeutic recreation facilities.

Research and Technology

In addition to being active in the development of numerous innovative orthotic devices during the pre-vaccine era, the medical staff was involved in ongoing research which led to publication of numerous reports in medical rehabilitation and orthopedic journals. More recently, international post-polio symposia were held in Warm Springs in 1984 and 1986 attended by internationally recognized medical researchers reporting results of their latest findings relating to post-polio sequelae. As a result of these symposia, medical textbooks were published summarizing the results of each symposium. Each has served as a standard reference for those interested in post-polio sequelae and for those conducting further research.

Today, the commitment to research continues in Warm Springs, not only in post-polio sequelae, but also including the many medical disabilities currently being treated at the facility. Presently, more than 30 research projects have been developed over the past 2 years, many of which have received national recognition.

In August, 1990, the Roosevelt Institute was the recipient of a U.S. Department of Education grant to establish a 3-year therapeutic recreation program facilitating the access of disabled people into community outdoor activities. Grant monies totaling in excess of \$240,000 are now providing patients and students the opportunity to explore and learn lifelong outdoor recreational interests and skills.



Figure 4. Students in an independent living class talk with an instructor in the Institute's historic quadrangle. Through its wide variety of programs, the Warm Springs facility served approximately 5500 patients and students in 1991.

Other areas being actively pursued include product development and testing. As assistive technology emerges, it is being carefully integrated into the service delivery system with a focus on assistive device

resource sites. These sites are serving to educate consumers and rehabilitation practitioners on the range of devices available and on their accessibility.

For further information concern-

ing the Roosevelt Warm Springs Institute for Rehabilitation, write Admissions Department, Roosevelt Institute, P.O. Box 1000, Warm Springs, GA 31830-0268 or call (404) 655-2036.

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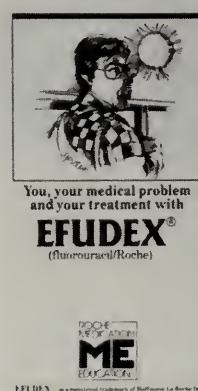
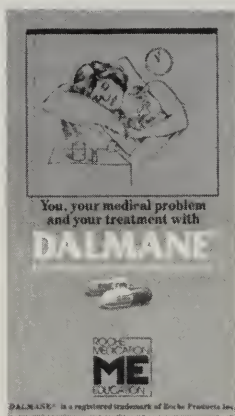
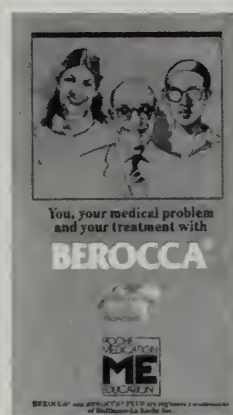
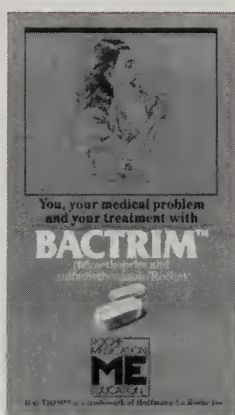


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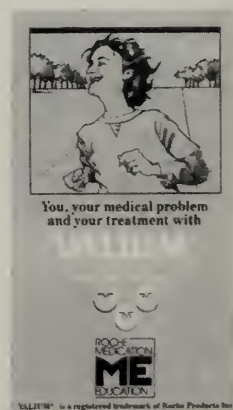
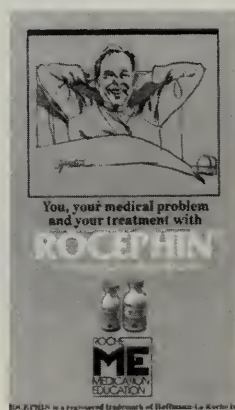
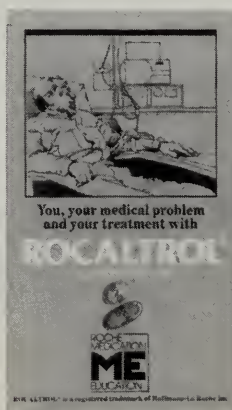
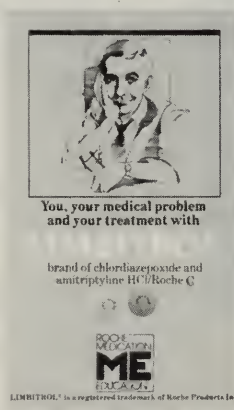
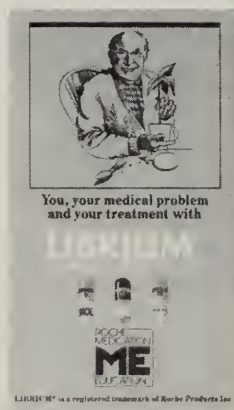


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Experience with Cultured Skin in a Georgia Regional Burn Unit

Edward J. Law, MD, Hermann K. Orlet, MD, Joseph M. Still, Jr., MD

Introduction

PATIENTS WITH LARGE burns that are third degree will require skin grafting and are at a significant risk of failure to survive. When the size of the burn exceeds the area of an available donor site from which skin may be harvested, the mortality rate climbs sharply.

Temporary methods of wound closure are available and include the use of porcine xenografts and cadaver allografts. In 1979, experience with a new method employing cultured human skin from the same patient was first published by Green.¹ The technique has progressively been improved and is now available for clinical use on a routine basis.

Clinical Experience

Humana Hospital-Augusta Burn Center in Augusta, Georgia, is a 24-bed unit which admitted 371 acutely burned patients last year. Patients who have survived their burn and require reconstructive surgery are also admitted and are treated on a separate ward. Usually patients are first admitted to a local hospital where care is initiated and

The use of cultured skin provides a new method for obtaining skin coverage and wound closure in patients with very large burns.

the patient is stabilized for transfer.

On arrival to the burn center, fluid resuscitation is carried out in accordance to the Parkland Formula, and respiratory support is provided. If significant areas of third degree burns are present, excisional surgery is begun within a few days after admission if the patient's clinical circumstances permit. Immediate grafting with the patient's own skin at the time of excision is carried out in the majority of cases. Tanner mesh expanded skin is used on patients with large

burns. Usually areas of excision are limited to 15-20% body surface at one operation. Repeat surgery is carried out at 3-5 day intervals. If the burn is large, donor sites are reharvested after healing which usually takes at least 2 weeks.

Patients who are considered for cultured skin are those with burns in excess of 60% body surface where available donor sites will be limited. In such cases, shortly after admission (preferably in the first 1-2 days), biopsies are obtained from unburned areas — frequently areas unsuitable for donor sites, such as the groin creases or axillae. In some cases, biopsies are obtained after it becomes apparent that more of the burn was third degree than originally estimated. Elliptical segments of skin approximately 1 X 1-1/2 inches are excised in four separate pieces. This skin is placed in specially prepared media for immediate shipment to the processing laboratory. All tissue culture is performed at the laboratories of BioSurface Technology, Inc., Cambridge, Massachusetts.

While culture of keratinocytes proceeds, serial excisional surgery

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TABLE 1 — Suitable Topical Agents for Use with Cultured Epidermal Grafts

<i>Acceptable</i>	<i>Rinsing Required</i>	<i>Not Acceptable</i>
Amphotericin	Acetic Acid	Anbesol
Bacitracin	Povidine Iodine	Chlorox
Bibiotic	Surgiclens	Furacin
Gentamicin		Glyoxide
GU irrigant		Hibiclens
Kanamycin		Scarlet Red
Mycostatin		Silver Nitrate
Neomycin		Silvadene
Polymyxin		Sulfamylon
Tobramycin		
Vancomycin		

TABLE 2 — Application of Cultured Skin

<i>Number</i>	<i>Postburn Day Biopsy</i>	<i>Postburn Day Cultured Skin Application</i>	<i>% Body Covered Cultured Skin</i>
1	55	81	15**
2	13	43	20
3	17	42	25
4	1	21	52*
5	2	30	36.5

*Died

**Loss of all grafts

TABLE 3 — Patient Summary

<i>Number</i>	<i>Age</i>	<i>% Burn</i>	<i>Operations for Wound Coverage</i>	<i>Pulmonary Complications</i>
1	50	59	28	Yes
2	33	60	11	Yes
3	32	61	12	Yes
4	5	70	6	Yes*
5	2	66	11	Yes

*Died

and grafting from available donor sites is carried out in the standard fashion in these patients. When the cultured skin is close to being available for application, the wound bed intended for grafting is prepared to receive it. It is felt to be desirable to place cadaver skin on the wound site for about a week prior to grafting with the cultured skin.

Dressings for several days prior to surgery and for approximately one week thereafter are carried out using antibiotic soaked dressings of a type found to be relatively innocuous to the cultured skin and appropriate to the organism in the wound. Some commonly used topical dressings are harmful to the cultured grafts and must be avoided. A listing of suitable and harmful

topical agents is included in Table 1. After healing, the grafts are exposed to air.

To date, five patients with burns ranging from 59-70% body surface have been grafted using cultured skin (Table 2). Patient age varied from 2 to 55 years. All had concomitant respiratory injury. Biopsies were taken in an additional three cases with very large burns who did

not survive long enough to have the cultured skin applied. Multiple operative procedures for debridement, dressing changes, and skin grafts were required. The number of operative procedures including dressing changes, excision and skin grafting is shown in Table 3. Operative procedures for release of contractures are not included.

Of the five grafted patients, the cultured skin took nicely in three cases and was felt to contribute to the patients' survival. However, late blistering was a problem in these three patients. In a fourth case, the cultured skin appeared to be taking well, but the patient died of sepsis. In one case involving a patient who had been in the hospital for a prolonged period prior to grafting, all cultured skin grafts failed to take. Standard grafting by reharvesting of previously used donor sites was eventually carried out and coverage was finally achieved.

Discussion

The use of cultured skin provides a new method for obtaining skin coverage and wound closure in patients with very large burns. In the past, various techniques to obtain wound healing have been employed including the use of expanded meshed skin which is now our standard method for grafting large burns. Postage stamp grafts have also been used in the past, again allowing an effective expansion of skin. Both of these methods, however, still require donor sites and a significant delay between procedures if the burn size requires reharvesting of donor sites. Grafting with allografts from related donors and cadaver donors has also been employed for temporary coverage.

The use of cultured skin has a number of drawbacks. It is easily traumatized, especially after application and in general does not take as well as standard grafts. Long-term durability does not appear to be as good as that obtained by conventional split thickness skin grafts.

There are drawbacks to the use of cultured skin. It is easily traumatized, especially after application and in general does not take as well as standard grafts.

Late blistering of the cultured skin has been reported as a problem and was encountered in all of our patients. Compression garments can be applied after 2-3 weeks, but care must be exercised to avoid blistering under the garments. Consistency and pliability in the long term are said to be satisfactory.² Our own follow-up experience is limited to a relatively short period of time.

The method is extremely expensive. Each 2.5 X 2.5 square centimeter piece of cultured skin costs \$350. There is also the drawback that a 3-4 week delay must occur between the biopsy and the availability of the cultured skin. As noted, three of our patients with extremely large burns died after taking the biopsies and before the availability of the skin. The take in four of our patients was quite satisfactory, although one later died. It was felt that in three cases the availability of cultured skin increased the efficacy and speed of obtaining skin graft coverage and wound coverage.

The patient who had a total loss of cultured skin graft was not an optimal candidate. This was the first case to be treated with cultured skin. The wounds were already quite old and covered by heavy granulation tissue before preparation for grafting. Also, the back is not felt to be the optimal site for application of cultured skin grafts due to increased graft loss from

pressure. Cultured skin graft take in this area has been reported by other authors as being inferior to the graft take of the anterior surface of the trunk and other areas where pressure is not a problem. Bacterial colonization of the wound was felt to have been present in spite of attempts to prepare the donor site with antibiotic soaks, debridement, and application of cadaver grafts a week prior to the application of cultured skin grafts.

The method of preparing cultured skin has been described by Green¹ in some detail. This work has proved that epidermal keratinocytes taken from humans can be grown in culture media. Under the conditions described, single cultured cells can be used to generate colonies that fuse and form an epithelium that is usable as a replacement for human epidermis. Culture-grown epithelium is obtained in Petrie dishes on suitable media and transferred to sheets of vaseline gauze, which are then used as the first layer of wound dressing. The technique has been adapted to various purposes. Gallico² has reported its use in eight patients with giant congenital nevi. Skin ulcers have been treated with cultured epidermal autografts with satisfactory healing of prolonged painful ulcers of long duration. Thirty-six ulcerations in 23 patients were treated in 1989.³

The great majority of patients in whom the cultured skin techniques have been employed were patients with burn injuries. Gallico⁴ reported survival of two very large burns, 87% and 98% body surface area, respectively, in 1984. Compton⁵ reported the use of this technique in 21 cases in 1989. Long-term follow-up was available, and satisfactory healing with long-term coverage is reported. It was noted after a year or so that changes had occurred in the underlying wound bed as wound healing scar formation and collagen remodeling occurred. The collagen bed became more dense

up to about 3 months. Collagen bundles by 6-18 months were reported as having produced nonlinear arrangement of fibers. By 2-3 years, elastic fibers were present and remodeling of the vascular architecture had taken place. Orig-

Cultured skin, in our cases and most other series, was added to other areas covered by conventional autografts and used in conjunction with these methods.

nally pioneered in the Boston area, other centers have now made use of the technique.

In 1990, Munster⁶ reported seven patients with a mean burn size of 69.6% treated successfully. They were compared with the statistically similar group of 18 historic controls who underwent coverage by conventional means. In this group, no significant differences in hospital stay, total number of operations, or costs were found. The method is now becoming available for more general usage in burn patients and in patients with other selected indications as well.

Conclusion

The cultured skin technique appears to offer an additional modality for covering patients with extremely large burns. Cultured skin, in our cases and most other series, was added to other areas covered by conventional autografts and used in conjunction with these methods. In a few cases, burns over 80% or 90% have been covered almost exclusively by cultured auto-

grafts.² The technique seems to be the best method currently available for obtaining coverage in those patients where unavailability of donor sites is a major problem.

References

1. Green H, Kehinde O, Thomas J. Growth of cultured human epidermal cells into multiple epithelia suitable for grafting. *Proc Natl Acad Sci* 1979;76:5665-5668.
2. Gallico G, O'Conner N, Compton C, et al. Permanent coverage of large burn wounds with autologous cultured human epithelium. *New Engl J M* 1984;311:448-451.
3. Phillips T, Kehinde O, Green H, et al. Treatment of skin ulcers with cultured epidermal allografts. *J Amer Acad Dermatol* 1989;21:191-199.
4. Gallico G, O'Connor N, Compton C, et al. Cultured epithelial autografts for giant congenital nevi. *Plast Reconstruct Surg* 1987;84:1-9.
5. Compton C, Gill J, Bradford D, et al. Skin regenerated from cultured epithelial autografts on full thickness burn wounds from six days to five years after grafting. *Lab Investigation* 1989;60:600-612.
6. Munster A, Weiner S, Spence R. Cultured epidermis for the coverage of massive burn wounds. *Ann Surg* 1990;211:676-679.

"And There's More..." — Federal Trade Commission Announces "New Concern" With Physician Joint Ventures

Robert N. Berg

In last month's *Journal*, we described how the Internal Revenue Service had opted to join others, including Congress and the Office of Inspector General of the U.S. Department of Health and Human Services, in challenging joint ventures formed by hospitals and physicians.¹ In late January of this year, having just completed editing the galley proof of that Legal Page article, I traveled to Washington, DC for the 15th annual seminar on "Antitrust in the Health Care Field," conducted by the National Health Lawyers Association. The last thing I expected to hear about was a further attack on health care joint ventures.

At lunch on the first day of the conference, the keynote speaker was Kevin J. Arquit, the Director of the Federal Trade Commission (FTC) Bureau of Competition. Keynote speakers are one of the most popular features of this annual seminar, as they oftentimes provide guidance and direction to health care attorneys and practitioners, in terms of the future activities of the antitrust regulators. This year would prove to be no different, as Director Arquit chose to announce the FTC's "New Concern in Health Care Antitrust Enforcement: Acquisition and Exercise of Market Power by Physician Ancillary Joint Ventures." In other words, the FTC has now apparently decided to jump on the "stop the self-referral" bandwagon.

Physician Joint Ventures in Ancillary Fields

Director Arquit focused his remarks on one particular type of physician joint venture formed to provide services or goods in a market that is outside, but functionally related to, the participating physicians' professional practice. Examples cited included physicians forming a partnership, outside of their practices, to set up a clinical laboratory, a physical therapy center, or perhaps a diagnostic imaging facility. (Other types of physician ancillary ventures might include diet centers, home health agencies, home infusion therapy services, kidney dialysis centers, and radiation therapy centers.) The Director then noted (bootstrapping upon the activities of Congress and the OIG) that these types of ancillary joint ventures among physicians have been the subject of a significant amount of criticism in recent years, most notably through criticism aimed at financial incentives of physicians to refer patients to self-owned ventures and the conflict of interest created as a result. He also pointed to "empirical studies" finding increased utilization and cost associated with such ventures.

Director Arquit noted that most

of the criticisms raised with regard to physician ancillary joint ventures emphasized non-antitrust issues (e.g., the general potential for abuse of self-referral by physicians who provide ancillary services). He also noted that agreements among physicians which limit patient choice may raise ethical issues without necessarily amounting to antitrust violations.²

However, the FTC is one of two federal agencies (the other being the U.S. Department of Justice) charged with responsibility for enforcing the antitrust laws. Accordingly, Director Arquit's general comments were followed by a more specific assessment of the "antitrust issues" involved in physician ancillary joint ventures. In particular, the Director noted that "the same physician-owner incentives for self-referral that lie at the heart of the conflict-of-interest issue (described above) may give rise to antitrust concerns: the potential in some cases for creating or enhancing market power in markets for the ancillary goods or services, resulting in higher prices and lower quality health care to consumers and monopoly profits to some health care suppliers." Director Arquit then acknowledged that the Health Care Office of the FTC's Bureau of Competition, in conjunction with various FTC Regional Offices and the FTC's Bureau of Economics, is "aggressively pursuing several investigations" of physi-

This article was prepared at the request of the *Journal*. Mr. Berg is a principal in the law firm of Vincent, Chorey, Taylor & Feil, Suite 1700, The Lenox Building, 3399 Peachtree Rd., Atlanta, GA 30326. Send reprint requests to Mr. Berg.

cian joint ventures. Typically, these investigations involve specialists who have joined together to sell durable medical equipment required by their patients, or have joined together to invest in significant equipment used to provide ancillary services to their patients. In these investigations, the antitrust regulators first look at the establishment of the venture, as well as its operation, in terms of whether there has been the creation or enhancement of market power in the market for the particular ancillary services or goods offered by the joint venture. If the regulators find such market power to exist, an antitrust violation may also exist.

Director Arquit cited, as an example, a venture involving participants who are specialists in a field whose patients are the main consumers of some particular ancillary services or goods. In that situation, he hypothesized, a relatively small number of physicians might be able to create substantial market power, by "channeling" patients to the venture.³ This "channeling" might arise in a number of scenarios, including physician directives to hospital discharge planners, specifying vendors in prescriptions, or even simple oral advice to patients.

Were such a situation to exist, the FTC might elect to challenge what it viewed as the unlawful accumulation or maintenance of market power by the venture, under one of several antitrust theories. First, the FTC may challenge the venture on a theory of "monopolization" under Section 2 of the Sherman Act.⁴ Under this theory, the FTC would look at the combination of competing physicians as a single entity and determine whether the market power of that entity arose legally (e.g., through successful competition) or illegally (e.g., through exclusionary means). As Director Ar-

‘The Federal Trade Commission has now apparently decided to jump on the “stop the self-referral” bandwagon....It would appear that the federal government has elected to focus a wide assortment of weapons in the fight against what it views to be abusive physician self-referrals.’

quit noted, if a sufficiently inclusive number of physicians in a given geographic market who have the power to channel patients establish a venture, the formation of that venture itself may create market power in the market for the ancillary service. This market power, in turn, may give the venture the power to raise prices above competitive levels, or reduce output. This could be challenged as unlawful monopolization.⁵

The FTC might also choose to challenge the creation of the venture under Section 7 of the Clayton Act,⁶ as an unlawful merger or acquisition. Under Section 7, a joint venture may be illegal if it substantially lessens competition, or tends to create a monopoly, in a particular geographic and product market. In essence, the FTC would look at the venture as a "partial merger" of the physicians' practices, and determine whether this merger could result in an unlawful accumulation of market power.

Finally, the FTC could choose to challenge the creation or operation of the joint venture under Section 1 of the Sherman Act,⁷ which gener-

ally prohibits combinations, conspiracies, and agreements which unreasonably restrain trade. Under this approach, the FTC would look for evidence of express or implied agreements which may restrict the referral of patients or provide exclusivity for the venture. Also relevant would be the pricing policies of the joint venture. Absent significant integration of their practices, it is debatable whether the joint venture physicians lawfully could agree on a single price for the ancillary services.

Conclusion

The antitrust laws have always applied to physician joint ventures, and it should come as no surprise that the formation and operation of physician ancillary joint ventures may give rise to antitrust concerns. What is surprising, however, is the fact that the FTC has announced its intention to investigate and pursue *aggressively* joint ventures in the health care field. Coming as it does on the heels of the other recent actions taken by the IRS and the OIG, it would appear that the federal government has elected to focus a wide assortment of weapons in the fight against what it views to be abusive physician self-referrals. As Director Arquit noted, these actions will serve "at least to attenuate the connection between a physician's referral decision and his or her ownership status."

Notes

1. Berg RN. Hospital/physician joint ventures take another direct hit. A 1992;81(3).

2. *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2, 31 (1984).

3. Patient "channeling" is a term which has become quite popular in the past year. It is usually used to describe the ability of a practitioner to control access to patients, and from this, the ability to steer patients to a particular vendor.

4. 15 U.S.C. §2.

5. Similarly, a Section 2 violation might be found for "attempted monopolization," if, among other things, the venture had a "dangerous probability" of succeeding in obtaining monopoly power.

6. 15 U.S.C. §18.

7. 15 U.S.C. §1.

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Laboratory Tests—False-positive tests for urobilinogen with Multistix[®] may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chloridiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method.

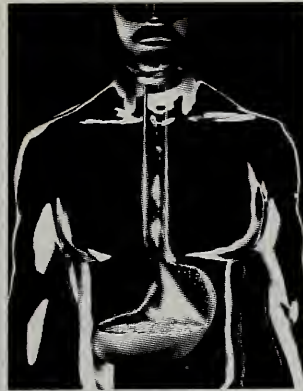
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Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubiaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage, although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon[®] is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral alpha-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85

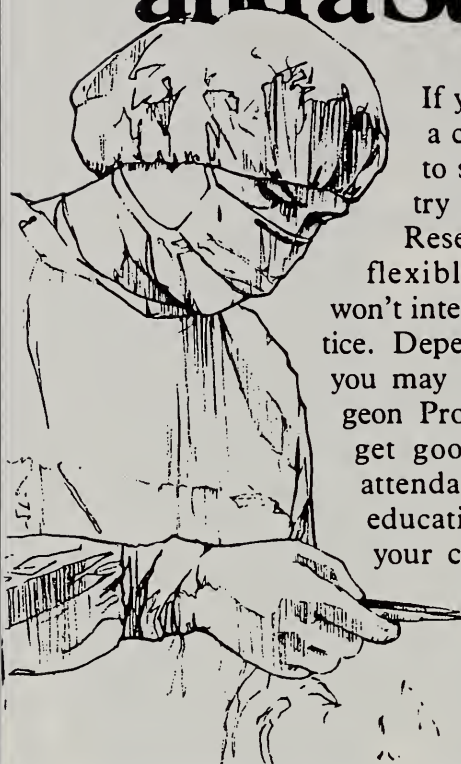


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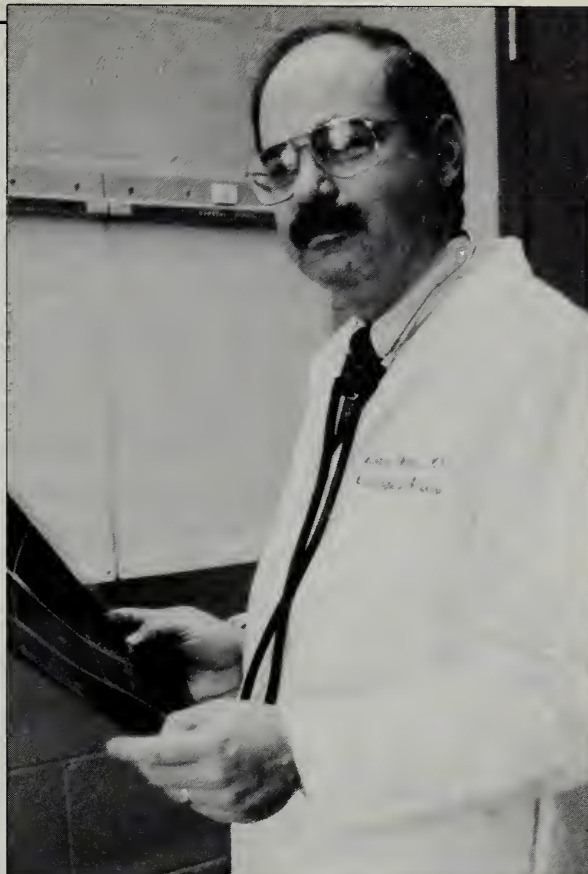
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Issues



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Health

Many groups in America face shared health risks. The AMA is aware that specific groups of people face distinctive risks, and that these risks translate into health care needs that will profoundly affect our health care system in the next thirty years. Making up these groups are:

Our children who are far more likely to die or be injured through car accidents, suicide, violence or depression than by disease.

Our elderly whose population is expected to double to more than 64 million by 2020. Health care professionals in training today will spend 50% of their careers caring for the elderly.

Our fastest-growing Hispanic population group which is disproportionately affected by HIV, diabetes, hypertension, tuberculosis, certain cancers and alcoholism.

And women who face the specific risks of osteoporosis, breast cancer and endometriosis.

The AMA is developing programs that will make a difference for each of these specific groups.

To improve adolescent health, the AMA publishes the *Target 2000* newsletter and coordinates the "National Adolescent Health Promotion Network," a group of more than 4,000 health professionals who work with adolescents. Would you like to join? Call 1-312-464-5471 for more details. The AMA is also developing guidelines to help physicians best deliver preventive services to adolescents.

The AMA is studying new ways to treat elderly patients. Our four-step goals for the elderly are to prevent

complications, halt further deterioration, rehabilitate, and maintain their maximum level of function and independence. We can often fulfill these goals with home care. Home care provides patients with equipment and services at home, where they can restore and maintain their maximum level of comfort, function and health.

To address the needs of the Hispanic population, the AMA has studied Hispanic health [see January 9, 1991 issue of *JAMA* for details] and encourages health education and prevention programs tailored to Hispanic language and culture. We urge other policy makers to address the specific health needs of Hispanics, and suggest that state and federal governments standardize collection of consistent vital statistics concerning Hispanics.

To ensure that women gain access to vital health-related information, the AMA created the "Women's Health Campaign." This campaign informs, motivates and supports women, and provides educational materials and experiences that address their specific health care concerns. Campaign tools include brochures, booklets, books, videos, audio cassettes, seminars, TV reports, national and local publicity, and a women's information data base.

Our nation faces serious challenges to our health and our health care system. Only by working together can we overcome them. For all Americans, the AMA has developed "Health Access America," a plan to reform our nation's current health care system to ensure that all Americans receive the quality health care they deserve.

PHYSICIAN WANTED

E.R. Physicians — Join the Liberty Healthcare Group providing Emergency Medical Services in Augusta, Georgia. Enjoy flexible hours while earning an excellent salary plus paid malpractice insurance. We seek BE/BC EM, IM, or FP trained physicians to assume the key role in this well-run E.R. For more information, contact Annamarie Alleva at 800-331-7122 toll free or 215-668-880. For immediate consideration, please fax C.V. to 215-667-5559. EOE.

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The Georgia Department of Human Resources invites interested physicians. Georgia is divided into 19 health districts. Each district is managed by a physician District Health Director who is responsible for planning, coordinating and directing all public health and mental health services. Requirements for the position include: An active license to practice medicine in Georgia, a master's degree in public health or related field and/or management experience in health care delivery. Current openings are located in: Albany, Dublin, LaGrange, Rome, and Savannah. **District Health Director positions** include a competitive salary and benefits, outstanding opportunities to effectively address health issues and excellent climates. Send curriculum vitae to: Brett S. Jackson, Acting Deputy Director, Office of Human Resource Management and Development, Room 206, 878 Peachtree St., Atlanta 30309.

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ADVERTISING INDEX

American Medical Association	196
American Medical Writers Association	195
Cheraw Family Medicine	197
Classified Advertisements	197
Georgia Hospital Association	191
Healthcare Consultants	199
Health Quip, Inc.	191
Knoll Pharmaceuticals	154, 155
Lilly, Eli & Company	192, 193
MAG Mutual Insurance Company	158
Palisades Pharmaceuticals, Inc.	193
Parke Davis	162-A, 162-B
Postgraduate Medicine	155
Roche Laboratories	183, 184
Searle, G. D.	200
University Medical Center	156
U.S. Air Force	191
U.S. Air Force Reserve	194
U.S. Army Reserve	160
Walton Rehabilitation Hospital	194

MANUSCRIPT INFORMATION

MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely to this *Journal*. **Manuscripts should be submitted on a 5¼" disc or a 3½" diskette compatible with IBM WordPerfect 5.1 or in ASCII format. Hard copy (double spaced, typewritten) should be sent with the disc/diskette.** Hard copy should be submitted in duplicate. Receipt of manuscripts will be acknowledged.

STYLE — Articles should range in length from 3000 to 4000 words. Footnotes, references, and photo legends should be typed on separate sheets, double-spaced. References should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages. **Articles with references that do not conform to the *Journal's* style will be returned.**

Sorter NA, Wasserman SI, Austen KF.
Cold urticaria release into circulation of
histamine and eosinophil chemotactic
factor of anaphylaxis during cold chal-
lenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

ILLUSTRATIONS — **Illustrations must be submitted in duplicate.** Illustrations, tables, etc., should bear the author's name and figure number. The cost of reproduction of illustrated material for publication in excess of three average illustrations and/or tables will be borne by the author, and the *Journal* will bill the author for this expense.

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MEDICAL EDITING SERVICES — If in the opinion of the *Journal* Editorial Board, material submitted for publication could be improved by a Medical Editing Service, the Editor will contact the author for his or her approval. Association members needing assistance in preparation of material for publications may also use this service. A reasonable charge is made for this service and the cost of this will be borne by the author.

About the Cover Artist: Joseph Piccillo

JOSEPH PICCILLO was born and educated in Buffalo, New York, where he teaches at the State University he attended, located across the street from the great collection of the Albright-Knox Art Gallery.

Piccillo's paintings and works on paper, from the end of the 1970s and throughout the 1980s, come from the realm of figuration. His intent lies somewhere between Andy Warhol's stark, isolated images juxtaposed against single violent background colors, and paintings by artists like Robert Longo, whose works have an edge of emotion which provides a delicate shift from the possibly pedantic narrative interest in figuration, towards an irony and grittiness which reinforce their emotional purpose.

His ambition is to create pictures in which the human image is presented in mythic proportions. Piccillo likes to think of himself as a commentator on our times — an intellectual cynic in a society which makes "heroes and heroines of Oliver North and Vanna White," as Piccillo puts it. However, he is also reluctant to preach, so what is important to Piccillo's work is his desire to capture in impact the heroic figure. "I suspect the genesis for all my work resides in a form of cynicism," says Piccillo, "not necessarily in a mean cynicism . . . but a certain perception that an environment that makes Oliver North and Vanna White our current hero and heroine is a strange place indeed. In the selection of images that I use in my work, my repertory, if you will, is an attempt to in some way juxtapose the ironic and absurd with the possibly sublime." However ridiculous the character in life, it is the visual impact of the heroic image which seizes this artist's imagination.

Piccillo's chiaroscuro is the heightened play of conflicting passions for freedom and raw power,

creative whimsy and rigorous control. This is the territory of dream, or nightmare. Teased on with clues (or "informations," to use a word Piccillo later came to favor,) that seemingly reference the known world of people, objects, and events, the viewer is irresistibly led on into the surrealistic mirrored hall of meanings that call out in familiar and resonant voices, but refuse to be pinned down. They speak as much to the subconscious as to the conscious mind.

The paradox of bondage — intimate, tortuous physical stricture practiced in the name of sexual license — is, of course, another extension of Piccillo's central aesthetic preoccupation. The contrast of the constricting artifice of leather and the natural vulnerability of flesh parallels the poise and costume of the dancer, the acrobatic contortions of the diver, the physical beauty and the bared teeth of the pit bull or the eagle's beak.

In amongst these recurring and disturbing images, isolated in the boxes that contain them, the smaller black and white portraits have a haunting and mysterious presence. Clearly not players as the other images are, they seem self-preoccupied, cool and unfazed, detached from the action, voyeur-like in their little window seats. They are at once sanitized in their distance from the action, yet complicit in it — and their complicity is that of the on-looker, the viewer, as it is the artist's. "I am a voyeur," he admits cheerfully, "as I think most people who make pictures probably are."

This constant play between distance and complicity is the moral force that involves one's restless and discomfiting participation in these pictures. Their drama, of course, is a purposeful and powerful hook. "A visitor will pass a hundred paintings in a museum," says



Piccillo. "I want mine to make them stop and look." Beyond the hook, however, the literary analogy with drama yields useful insights with his work:

Yet while the artists himself returns frequently to the terminology of drama in speaking of his work, he resists too close a parallel. "I don't want them to be pictures." He is concerned, however, that they challenge viewers to think beyond them, to the current state of the world. While at pains to avoid polemical positions, he insists that a politically-controlled world must be political. "I think we live in a madhouse. Recently I've become jaded a bit. I just get frustrated, not angry anymore." Yet he warms up as he cites the example of an Oliver North. "What kind of society is it," he asks rhetorically, "that gives credibility to people who should be in jail? And if its like this now, what will things be like in ten years? In twenty years?"

At the same time, he remains an optimist. Brought up as "a Norman Thomas liberal," he was taught always to question, and it is that attitude that he seeks to perpetuate in his art. If it confronts the viewer with images that ask the difficult questions about power and control, and on the other hand about creativity and freedom, it is an act of thoughtful provocation. "But it's not," he insists, "to pontificate or polemicize. You can deal with it any way you want." And then he adds, with refreshing self-deprecation for an artist of such strong conviction, "They're only pictures, after all. They shouldn't be taken all that seriously."



Cyler D. Garner, M.D.

WHEN I WAS TOLD that this issue was to be devoted to sexual topics, I thought, "Great, I'll be able to end my presidency with a column in one of the best-read issues in the history of the *Journal*." This, then, is my farewell song as president of MAG, and I want to say that though I leave with sadness, I'm also proud of my "turn at the watch."

A year ago when I was installed as president, I promised you that I was a man of few words. After 12 months as leader of an organization that is in the eye of so many storms, I've had to put forth more words than I ever thought I would. We've had troubles in Gordon and troubles in Atlanta and troubles in Washington, so I've had to speak. But when I began I did warn, using an old Chinese curse, that we live in interesting times. No prophet has ever said a truer word.

I did not know a year ago that medical care would be one of the top two issues in the presidential race. We knew that it would be important, but no one could have guessed it would absorb so much attention. A year ago, I think only a relatively small group of people were concerned about the infant mortality issue in this state. Today, it is a wide-spread concern of many of our citizens. And to be frank, I

never thought I would see the people of Gordon so deeply concerned about AIDS disease and what to do about it as they are today. And, more frivolously, I never thought I'd see the Braves on a winning streak, or find that even a small group of people would object to a name when it began to carry a successful connotation.

For an individual who values democracy, I'm pleased to see all this debate. Having been a mayor for many years, I know that when the people are silent, their leadership can easily have problems keeping up with their needs. Of course, there have been times when my philosophy has been sorely tried this year.

I've seen more and more physicians becoming involved outside of their individual practices in just the past year. Remember 10 years ago when a physician could work in the office or the hospital, then go home and not have to worry about whether he or she would be allowed to continue to practice medicine, or whether another wedge would be driven between the doctor-patient relationship? Or when we felt we didn't have to get involved in the community, because saving lives was enough to do?

It is not that way anymore, and I

suspect it won't be that way again in our lifetimes. I'm proud of you who have gotten involved in your communities, in trying to assure better lives for your patients through your efforts outside your practice. I'm pleased in the interest in issues of dealing with domestic violence, infant mortality, and health access. If you have joined the efforts, accept my heartfelt thanks. If you have not, there is still plenty of room for you, and you will be welcome.

It is good to look back, especially if you have been as fortunate in your presidency as I have been. So much ground work enabled me to have a stellar year. We saw the end of HealthCare Compare, we saw an outstanding legislative session for medicine, we saw Health Access Georgia becoming a working, living solution rather than a document gathering dust, as could have happened without you. We have, indeed, been "living in interesting times." Thank you all for a good year.

Cyler D. Garner, M.D.

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quinapril HCl tablets 10, 20, 40 mg



* See DOSAGE AND ADMINISTRATION section of prescribing information.

† If, after an adequate trial of ACCUPRIL alone, based on your medical judgment as the prescribing physician, you determine that your patient requires the addition of a diuretic, Parke-Davis will refund to the patient his/her cost for the diuretic prescription less any amount reimbursed or paid for by an HMO, insurance company, or any other plan or program.

For more details, ask your Parke-Davis Representative or call 1-800-955-3077.

‡ In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.

ACCUPRIL is available in 10, 20, and 40 mg tablets. Usual initial starting dosage is 10 mg once daily.

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Please see brief summary of prescribing information on following page.

Accupril® (Quinapril Hydrochloride Tablets)

Before prescribing, please see full prescribing information. A brief summary follows.

INDICATIONS AND USAGE

ACCUPRIL is indicated for the treatment of hypertension. It may be used alone or in combination with thiazide diuretics.

In using ACCUPRIL, consideration should be given to the fact that another angiotensin-converting enzyme (ACE) inhibitor, captopril, has caused agranulocytosis, particularly in patients with renal impairment or collagen vascular disease. Available data are insufficient to show that ACCUPRIL does not have a similar risk (see WARNINGS).

CONTRAINDICATIONS

ACCUPRIL is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

WARNINGS

Angioedema: Angioedema of the face, extremities, lips, tongue, glottis, and larynx has been reported in patients treated with ACE inhibitors and has been seen in 0.1% of patients receiving ACCUPRIL. Angioedema associated with laryngeal edema can be fatal. If laryngeal stridor or angioedema of the face, tongue, or glottis occurs, treatment with ACCUPRIL should be discontinued immediately, the patient treated in accordance with accepted medical care, and carefully observed until the swelling disappears. In instances where swelling is confined to the face and lips, the condition generally resolves without treatment; antihistamines may be useful in relieving symptoms.

Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, emergency therapy including, but not limited to, subcutaneous epinephrine solution 1:1000 (0.3 to 0.5 mL) should be promptly administered (see ADVERSE REACTIONS).

Hypotension: Symptomatic hypotension was rarely seen in uncomplicated hypertensive patients treated with ACCUPRIL but, as with other ACE inhibitors, it is a possible consequence of therapy in salt/volume depleted patients, such as those previously treated with diuretics or dietary salt restriction or who are on dialysis (see PRECAUTIONS, DRUG INTERACTIONS, and ADVERSE REACTIONS). In controlled studies, syncope was observed in 0.4% of patients (N = 3203); this incidence was similar to that observed for captopril (1%) and enalapril (0.8%).

In patients with concomitant congestive heart failure, with or without associated renal insufficiency, ACE inhibitor therapy may cause excessive hypotension, which may be associated with oliguria or azotemia and, rarely, with acute renal failure and death. In such patients, ACCUPRIL therapy should be started at the recommended dose under close medical supervision. These patients should be followed closely for the first 2 weeks of treatment and whenever the dosage of antihypertensive medication is increased (see DOSAGE AND ADMINISTRATION).

If symptomatic hypotension occurs, the patient should be placed in the supine position and, if necessary, normal saline may be administered intravenously. A transient hypotensive response is not a contraindication to further doses; however, lower doses of ACCUPRIL or reduced concomitant diuretic therapy should be considered.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression rarely in patients with uncomplicated hypertension, but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease such as systemic lupus erythematosus or scleroderma. Agranulocytosis did occur during ACCUPRIL treatment in one patient with a history of neutropenia during previous captopril therapy. Available data from clinical trials of ACCUPRIL are insufficient to show that, in patients without prior reactions to other ACE inhibitors, ACCUPRIL does not cause agranulocytosis at similar rates. As with other ACE inhibitors, periodic monitoring of white blood cell counts in patients with collagen vascular disease and/or renal disease should be considered.

Fetal/Neonatal morbidity and mortality: ACE inhibitors, including ACCUPRIL, can cause fetal and neonatal morbidity and mortality when administered to pregnant women.

When ACE inhibitors have been used during the second and third trimesters of pregnancy, there have been reports of hypotension, renal failure, skull hypoplasia, and death. Oligohydramnios has also been reported, presumably resulting from decreased fetal renal function; oligohydramnios has been associated with fetal limb contractures, craniofacial deformities, hypoplastic lung development, and intrauterine growth retardation.

Prematurity and patent ductus arteriosus have been reported, although it is not clear whether these occurrences were due to the ACE-inhibitor exposure or to the mother's underlying disease. It is not known whether exposure limited to the first trimester can adversely affect fetal outcome.

A patient who becomes pregnant while taking ACE inhibitors, or who takes ACE inhibitors when already pregnant, should be apprised of the potential hazard to her fetus. If she continues to receive ACE inhibitors during the second or third trimester of pregnancy, frequent ultrasound examinations should be performed to look for oligohydramnios. When oligohydramnios is found, ACE inhibitors should generally be discontinued.

Infants with histories of in utero exposure to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion. Hemodialysis and peritoneal dialysis have little effect on the elimination of quinapril and quinaprilat.

No fetotoxic or teratogenic effects were observed in rats at quinapril doses as high as 300 mg/kg/day (180 and 30 times the maximum daily human dose when based on mg/kg and mg/m², respectively), despite maternal toxicity at 150 mg/kg/day. Tested later in gestation and during lactation, reduced offspring body weight was seen at ≥25 mg/kg/day, and changes in renal histology (juxtaglomerular cell hypertrophy, tubular/pelvic dilation, glomerulosclerosis) were observed both in dams and offspring treated with 150 mg/kg/day. Quinapril was not teratogenic in the rabbit; however, as noted with other ACE inhibitors, maternal toxicity and embryotoxicity were seen in some rabbits at quinapril doses as low as 0.5 mg/kg/day (one time the recommended human dose) and 1.0 mg/kg/day, respectively.

PRECAUTIONS

General

Impaired renal function: As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including ACCUPRIL, may be associated with oliguria and/or progressive azotemia and rarely acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine have been observed in some patients following ACE inhibitor therapy. These increases were almost always reversible upon discontinuation of the ACE inhibitor and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some hypertensive patients with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when ACCUPRIL has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of any diuretic and/or ACCUPRIL may be required.

Evaluation of hypertensive patients should always include assessment of renal function (see DOSAGE AND ADMINISTRATION).

Hyperkalemia and potassium-sparing diuretics: In clinical trials, hyperkalemia (serum potassium ≥5.8 mmol/L) occurred in approximately 2% of patients receiving ACCUPRIL. In most cases, elevated serum potassium levels were isolated values which resolved despite continued therapy. Less than 0.1% of patients discontinued therapy due to hyperkalemia. Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with ACCUPRIL (see PRECAUTIONS, Drug Interactions).

Surgery/anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, ACCUPRIL will block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients

Angioedema: Angioedema, including laryngeal edema, can occur with treatment with ACE inhibitors, especially following the first dose. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to stop taking the drug until they have consulted with their physician (see WARNINGS).

Symptomatic hypotension: Patients should be cautioned that lightheadedness can occur, especially during the first few days of ACCUPRIL therapy, and that it should be reported to a physician. If actual syncope occurs, patients should be told to not take the drug until they have consulted with their physician (see WARNINGS).

All patients should be cautioned that inadequate fluid intake or excessive perspiration, diarrhea, or vomiting can lead to an excessive fall in blood pressure because of reduction in fluid volume, with the same consequences of lightheadedness and possible syncope.

Patients planning to undergo any surgery and/or anesthesia should be told to inform their physician that they are taking an ACE inhibitor.

Hyperkalemia: Patients should be told not to use potassium supplements or salt substitutes containing potassium without consulting their physician (see PRECAUTIONS).

Accupril® (Quinapril Hydrochloride Tablets)

Neutropenia: Patients should be told to report promptly any indication of infection (eg, sore throat, fever) which could be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with ACCUPRIL is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions

Concomitant diuretic therapy: As with other ACE inhibitors, patients on diuretics, especially those on recently instituted diuretic therapy, may occasionally experience an excessive reduction of blood pressure after initiation of therapy with ACCUPRIL. The possibility of hypotensive effects with ACCUPRIL may be minimized by either discontinuing the diuretic or cautiously increasing salt intake prior to initiation of treatment with ACCUPRIL. If it is not possible to discontinue the diuretic, the starting dose of quinapril should be reduced (see DOSAGE AND ADMINISTRATION).

Agents increasing serum potassium: Quinapril can attenuate potassium loss caused by thiazide diuretics and increase serum potassium when used alone. If concomitant therapy of ACCUPRIL with potassium-sparing diuretics (eg, spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes is indicated, they should be used with caution along with appropriate monitoring of serum potassium (see PRECAUTIONS).

Tetracycline and other drugs that interact with magnesium: Simultaneous administration of tetracycline with ACCUPRIL reduced the absorption of tetracycline by approximately 28% to 37%, possibly due to the high magnesium content in ACCUPRIL tablets. This interaction should be considered if coprescribing ACCUPRIL and tetracycline or other drugs that interact with magnesium.

Lithium: Increased serum lithium levels and symptoms of lithium toxicity have been reported in patients receiving concomitant lithium and ACE inhibitor therapy. These drugs should be co-administered with caution, and frequent monitoring of serum lithium levels is recommended. If a diuretic is also used, it may increase the risk of lithium toxicity.

Other agents: Drug interaction studies of ACCUPRIL with other agents showed:

- Multiple dose therapy with propranolol or cimetidine has no effect on the pharmacokinetics of single doses of ACCUPRIL.
- The anticoagulant effect of a single dose of warfarin (measured by prothrombin time) was not significantly changed by quinapril coadministration twice-daily.
- ACCUPRIL treatment did not affect the pharmacokinetics of digoxin.
- No pharmacokinetic interaction was observed when single doses of ACCUPRIL and hydrochlorothiazide were administered concomitantly.

Carcinogenesis, Mutagenesis, Impairment of Fertility

Quinapril hydrochloride was not carcinogenic in mice or rats when given in doses up to 75 or 100 mg/kg/day (50 to 60 times the maximum human daily dose, respectively, on a mg/kg basis and 3.8 to 10 times the maximum human daily dose when based on a mg/m² basis) for 104 weeks. Female rats given the highest dose level had an increased incidence of mesenteric lymph node hemangiomas and skin/subcutaneous lipomas. Neither quinapril nor quinaprilat were mutagenic in the Ames bacterial assay with or without metabolic activation. Quinapril was also negative in the following genetic toxicology studies: *in vitro* mammalian cell point mutation, sister chromatid exchange in cultured mammalian cells, micronucleus test with mice, *in vitro* chromosome aberration with V79 cultured lung cells, and in an *in vivo* cytogenetic study with rat bone marrow. There were no adverse effects on fertility or reproduction in rats at doses up to 100 mg/kg/day (60 and 10 times the maximum daily human dose when based on mg/kg and mg/m², respectively).

Pregnancy

Pregnancy Category D: See WARNINGS, Fetal/Neonatal morbidity and mortality.

Nursing Mothers

It is not known if quinapril or its metabolites are secreted in human milk. Quinapril is secreted to a limited extent, however, in milk of lactating rats (5% or less of the plasma drug concentration was found in rat milk). Because many drugs are secreted in human milk, caution should be exercised when ACCUPRIL is given to a nursing mother.

Geriatric Use

Elderly patients exhibited increased area under the plasma concentration time curve (AUC) and peak levels for quinaprilat compared to values observed in younger patients; this appeared to relate to decreased renal function rather than to age itself. In controlled and uncontrolled studies of ACCUPRIL where 918 (21%) patients were 65 years and older, no overall differences in effectiveness or safety were observed between older and younger patients. However, greater sensitivity of some older individual patients cannot be ruled out.

Pediatric Use

The safety and effectiveness of ACCUPRIL in children have not been established.

ADVERSE REACTIONS

ACCUPRIL has been evaluated for safety in 4960 subjects and patients. Of these, 3203 patients, including 655 elderly patients, participated in controlled clinical trials. ACCUPRIL has been evaluated for long-term safety in over 1400 patients treated for 1 year or more.

Adverse experiences were usually mild and transient.

Discontinuation of therapy because of adverse events was required in 4.7% of patients treated with ACCUPRIL in placebo-controlled hypertension trials.

Adverse experiences probably or possibly related to therapy or of unknown relationship to therapy occurring in 1% or more of the 1563 patients in placebo-controlled hypertension trials who were treated with ACCUPRIL are shown below.

Adverse Events in Placebo-Controlled Trials

	ACCUPRIL (N = 1563) Incidence (Discontinuation)	Placebo (N = 579) Incidence (Discontinuation)
Headache	5.6 (0.7)	10.9 (0.7)
Dizziness	3.9 (0.8)	2.6 (0.2)
Fatigue	2.6 (0.3)	1.0
Coughing	2.0 (0.5)	0.0
Nausea/Vomiting	1.4 (0.3)	1.9 (0.2)
Abdominal Pain	1.0 (0.2)	0.7

Clinical adverse experiences probably or possibly related, or of uncertain relationship to therapy, occurring in 0.5% to 1.0% (except as noted) of the patients treated with ACCUPRIL (with or without concomitant diuretic) in controlled or uncontrolled trials (N = 4397) and less frequent, clinically significant events seen in clinical trials or post-marketing experience (the rarer events are in *italics*) include (listed by body system):

General: back pain, malaise

Cardiovascular: palpitation, vasodilation, tachycardia, *heart failure, hyperkalemia, myocardial infarction, cerebrovascular accident, hypertensive crisis, angina pectoris, orthostatic hypotension, cardiac rhythm disturbances*

Gastrointestinal: dry mouth or throat, constipation, *gastrointestinal hemorrhage, pancreatitis, abnormal liver function tests*

Nervous/Psychiatric: somnolence, vertigo, syncope, *nervousness, depression*

Integumentary: increased sweating, pruritus, *exfoliative dermatitis, photosensitivity reaction*

Urogenital: *acute renal failure*

Other: amblyopia, pharyngitis, sinusitis, bronchitis, *agranulocytosis, thrombocytopenia*

Angioedema: angioedema has been reported in patients receiving ACCUPRIL (0.1%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with ACCUPRIL should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Clinical Laboratory Test Findings

Hematology: (See WARNINGS)

Hyperkalemia: (See PRECAUTIONS)

Creatinine and blood urea nitrogen: Increases (>1.25 times the upper limit of normal) in serum creatinine and blood urea nitrogen were observed in 2% and 2%, respectively, of patients treated with ACCUPRIL alone. Increases are more likely to occur in patients receiving concomitant diuretic therapy than in those on ACCUPRIL alone. These increases often remit on continued therapy.

* In some patients, the antihypertensive effect may diminish toward the end of the once-daily dosing interval. In such patients, an increase in dosage or twice-daily administration may be warranted.



Division of Warner-Lambert Company
Morris Plains, New Jersey 07950

PD-103-JA-7164-A2(022)

Of Chromosome X and Y — Of Passion

Charles R. Underwood, MD

“Let us hesitate no longer to announce that the sensual passions and mysteries are equally sacred with the spiritual mysteries and passions. Who would deny it any more? The only thing unbearable is the degradation, the prostitution of the living mysteries in us. Let man only approach his own self with a deep respect, even reverence for all that the creative soul, the God-mystery within us, puts forth. Then we shall all be sound and free. Lewdness is hateful because it impairs our integrity and our proud being.

The creative, spontaneous soul sends forth its promptings of desire and aspiration in us. These promptings are our true fate, which is our business to fulfil. A fate dictated from outside, from theory or from circumstance, is a false fate. . . .

Man struggles with his unborn needs and fulfillment. New unfoldings struggle up in torment in him, as buds struggle forth from the midst of a plant. Any man of real individuality tries to know and to understand what is happening, even in himself, as he goes along. This struggle for verbal consciousness should not be left out in art. It is a very great part of life. It is not superimposition of a theory. It is the passionate struggle into conscious being.”

From the Foreward to
Women in Love

D. H. LAWRENCE,
12 SEPTEMBER 1919

“I cast a glance backward at this wasteland of our human sexuality and yearn to see somewhere the beauty, the excitement, the anticipation — yearn to find the pure love which I know exists.”

“He says it isn’t love he wants,” she replied.

“What is it then?” Hermione was slow and level.

“He wants me really to accept him in marriage.”

Hermione was silent for some time, watching Ursula with slow pensive eyes.

“Does he?” she said at length, without expression. Then, rousing, “And what is it you don’t want? You don’t want marriage?”

“No — I don’t — not really. I don’t want to give the sort of submission he insists on. He wants me to give myself up — and I simply don’t feel that I can do it.”

Again there was a long pause before Hermione replied:

“Not if you don’t want to.” Then again there was silence. Hermione shuddered with a strange desire. Ah, if only he has asked her to subserve

him, to be his slave! She shuddered with desire.

Women in Love
D. H. LAWRENCE

DEEP IN THE VAST wilderness of our infancy and childhood, and for unknown genetic ages before, resides a formative process, a “secret garden,” giving rise in the years of our physical and emotional maturity to the most gratifying yet at times destructive aspects of who and what we become. Giving rise to that part of each of us which we call the sexual drive. That “drive” has indeed with categorical authority been said by some to be the controlling factor of many such, leading the human organism to perfection or to destruction as they pursue the years of their lives in work or love or play. The tenet has been challenged quite surely, and yet cast but a quick glance backward in time and ask with hidden honesty, “When did the heart thump and the pulse quicken? When did the morning sunrise bring the greatest anticipation of personal ego and unlimited capacity for work and accomplishment? When was the personal toilet carried out with the most precise care? When did one tremble the most with anticipation?”

May I, and quickly, digress to beg of the reader understanding and forgiveness. I am but a male of the species. Of such, I was given no

choice and thus of these opinions, these statements, I have but limited control.

This said, and hopefully with insight, I seem to have known first of sexual differentiation in early childhood. Knew that girls were different. Vaguely that pink and blue meant "girl" and "boy." The amazing revelation came, not unexpectedly for most one might hope, from a pair of rabbits. As a mere child I was raising them, "breeding" them I learned later, to provide the means for a local physician to perform the pregnancy test of that day. Careful and judicious inquiry led to an understanding of such mysteries as mating, breeding, pregnancy — at least to an understanding as seen through a child's eyes of the sexual habits and proclivity of the rabbit. The great adventure had begun.

The teenage years opened vistas of exotic and erotic wonderment. Education came furtively and with a degree of guilt through whispered restroom conversations and covert "fuck books." A neighbor's father, a physician, lent unknown educational assistance as a worn copy of *Gray's Anatomy* opened effortlessly to those pages depicting ever so graphically the anatomical differentiation of the sexes. Lent "color" to "pink and blue."

Ragged maturation continued within the constrictive confines of Southern conservative gentility with wet dreams, present or not, being denied and masturbation whis-

pered threateningly as leading unrelentingly to insanity. Cotton Mather and *The Wrath of an Angry God* lurked menacingly in the shadows.

The mature years of our life arrive. I sit amidst the elders of my church as we discuss the "sin" of homosexuality. Of lesbianism. I say to my fellow elder, "You should not bother so much about them. They too are God's children. Perhaps one sat next to you at church this morning." He pales and shudders. I browse among the shelves of a bookstore where I find for public consumption these volumes:

Guide to Gracious Lesbian Living Making Sex — Body and Gender From the Greeks to Fraud — Thomas Laqueur

Women on Top — Nancy Friday
The Joy of Sex — Alex Comfort, M.D., D.S.C.

The New Joy of Sex — Alex Comfort, M.D., D.S.C.

Sexual Pleasures — What Women Really Want — Susan Bakas

Wild in Bed Together — Graham Masterton

Sex Begins in the Kitchen — Dr. Kevin Lemon

I wander unobtrusively into a "XXX" bookstore for "educational" purposes casting quick glances about as I enter, only to rush out as strangely clad figures ease up beside me. I read of "Uncle Ed" who spends his productive years luring young men and boys to his apartment — and purchases

their used socks and underwear. I turn to the sports page of my morning paper to find that Mike Tyson, incarcerated in a Federal penitentiary for the crime of unbridled passion, for statutory rape, must be protected himself from fellow inmates who would vent their own distorted and repressed sexual passion upon him. I encounter my medical school classmate now released from the confines of prison following indictment for sexually exploiting children. I cast a glance backward at this wasteland of our human sexuality and yearn to see somewhere the beauty, the excitement, and anticipation — yearn to find the pure love which I know exists.

Yet, so it is that we find ourselves. Entrapped, encased, perhaps irrevocably and uncontrollably the prisoners of those ancient, perhaps archaic, predeterminants of what we are. Of who we are. So do we find ourselves afire — inspired and creatively motivated — by the excitement of something different which we fain would understand. Or else, searching endlessly for the answer to the unsolvable question as to why we are driven to acts of sexual pleasure which as yet in this present environment are met with social ostracism or legislatively mandated punishment. It is indeed enough to lead one to cry aloud, "Why, oh why, my God — hath thou made me such?"

Introducing This Special Issue

Gene G. Abel, MD

THERE IS A LOT of talk about sex these days. The news is filled with sexual accusations against politicians, reports of lawsuits against physicians and ministers who have gotten sexually entangled with women or young boys they counseled, and never ending sexual gossip about the shenanigans of sports stars, movie stars, and royalty.

This new public candor about sexuality poses a particular dilemma for the physician. Patients expect their doctors to have a high level of sophisticated knowledge about anything that might go wrong in their sexual functioning and to be able to present instant medical answers and referrals. Of course, the patient expects the physician to do this sensitively, discreetly, and using the right words that show that their physician is terribly comfortable discussing absolutely everything about sexual intercourse. Unfortunately for us, now comes the hard part. What do we actually know?

I was trained 25 years ago at the University of Iowa, the only medical school in the state. It was (and is) an excellent institution with outstanding departments of medicine, urology, psychiatry, and neurology. However, my only training in sexuality was 1 hour long. What I remember from that hour is that we were all asked to shout all the jargon words we had heard for various sex terms. Although it seemed to be a lot of fun at the time, it did not

‘Presented in this month’s Journal are the latest medical procedures for the diagnosis and treatment of sexual dysfunctions — male and female — presented by national experts and Georgia physicians who are experienced in treating sexually dysfunctional patients in their daily practice.’

help me prepare for distraught patients coming to my office asking for treatment for their serious sexual problems. During the past 25 years, however, I did embellish that 1 hour medical training. I started to read the medical literature on human sexuality, I attended conferences, and then I applied for — and was granted — federal grants to do research on organic causes for sexual dysfunction, on the consequences of sexual victimization,

Dr. Abel is a sex therapist with the Behavioral Medicine Institute in Atlanta and Guest Editor of this special issue of the Journal. Send reprint requests to him at 3280 Howell Mill Rd., Suite T-30, West Wing, Atlanta, GA 30327-4101.

and on the prevention and treatment of various categories of sexual misconduct. It was only after this further training that I felt comfortable beginning to teach sex courses to medical students and residents at various medical schools.

What I have tried to do in this month’s Journal is give you the latest medical procedures for the diagnosis and treatment of sexual dysfunctions — male and female — presented by national experts and Georgia physicians who are experienced in treating sexually dysfunctional patients in their daily practice.

Steven Levine, M.D., of the Center for Human Sexuality at the Cleveland Clinic, outlines what a physician needs to know about male sexual dysfunction problems. Because males typically associate their self-worth closely with their sexual performance, it is inevitable that when sexual functioning goes awry, most males are upset, perplexed, and want help. Unfortunately, they are reluctant to seek it out.

Maxwell White, M.D., a urologist at the Atlanta Urological Group, outlines the new assessment methodologies for males with sexual dysfunction and shows the critical role that urologic evaluation plays in a total assessment. He has included a review of the use of prostaticlandin E1, so that you could become familiar with its new use.

Sandra Leiblum, Ph.D., of Rutgers University, speaks from years of research experience on the problems women have when they become sexually dysfunctional.

Anthony Karpas, M.D., an endocrinologist with Atlanta Medical Associates, reviews how hormonal issues intertwine with the development and functioning of female sexual behavior. His review article demonstrates the complexities of organic functioning and emotional issues in women.

Lynda Talmadge, Ph.D., and **William Talmadge, Ph.D.**, of Talmadge and Talmadge, PC, give an excellent discussion of how the physician can best approach a couple when sexual dysfunction has disrupted their relationship. The physician would do well to attend to the dyad, not just the partner with the designated sexual problem.

Finally, **Gene G. Abel, M.D.**, and **Drue H. Barrett, Ph.D.**, from the Behavioral Medicine Institute of Atlanta, and **Peter Gardos, B.A.**, from Georgia State University, review problems of sexual misconduct between physician and patient. This topic was included because of public and professional concern about sexual misconduct of professionals, not only here in Georgia, but nationwide. We review the frequency and characteristics of the problem and outline a treatment program currently used in Georgia for professionals with sexual misconduct.

We hope that this month's Journal will help you become more informed about various aspects of human sexuality so that you can provide better evaluation and treatment to your patients. Some of you

‘Patients expect their doctors to have a high level of knowledge about anything that might go wrong in their sexual functioning and to be able to present instant medical answers and referrals. What do we actually know? 9

already do sexual counseling while others will want to refer such cases.

How to talk to patients about referring them to a specialist

Referring a patient with a sensitive problem such as sexual dysfunction can be problematic, since some patients may misinterpret your referral as a rejection of them because of the nature of their problem. To prevent such a misinterpretation, it is best not to say, "I don't treat your kind of problems so I am going to refer you to Dr. Smith." Instead, a better communication might be, "I can hear from talking with you that this sexual difficulty is really something that you would like to solve. I have referred a number of my patients with sexual problems to Dr. Smith, and I have really been impressed by how much my patients have been helped by him (her). Dr. Smith does such a good job in this area, would it be alright with you if I gave him(her) a call to see if we could arrange an appointment?" In the latter case, the patient is more likely to appreciate

that you are making the referral because you are concerned about him(her). A good physician's primary concern is in the improved health of their patients, including their sexual health

Four ways to select a referral

How should you select an appropriate referral for patients with sexual problems? Most physicians refer patients to therapists who have successfully treated other patients with sexual problems. A second approach would be to ask colleagues who they have referred patients to with sexual dysfunction where follow up has indicated success. A third approach would be to contact one of the medical schools here in Georgia to ask for specific recommendations.

Finally, there are a number of national organizations that certify sex therapists. These organizations will send you a list of accredited sex therapists in your area. Two of these are:

American Association of Sex Educators, Counselors, and Therapists
435 North Michigan Ave., Suite 1717
Chicago, Illinois 60611-4067

S. Michael Plaut, Ph.D., Secretary
Society for Sex Therapy and Research (SSTAR)
Department of Psychiatry
University of Maryland School of Medicine
645 West Redwood Street
Baltimore, Maryland 21201.

We hope you find this volume enjoyable and informative reading and a help to you and your patients.

Male Sexual Problems and the General Physician

Stephen B. Levine, MD

Introduction

MEN GENERALLY have an undercurrent of anxiety about their sexuality. Sexual worries vary predictably with age: young men worry about the rapidity of their ejaculations in the vagina; middle-aged men worry about their waning sexual desire and intercourse frequency; older men worry about their less reliable erections. When serious or chronic disease is superimposed on the life cycle of male sexual concerns, these anxieties typically are heightened, often to the point that a sexual pattern becomes clearly dysfunctional. Sometimes when the illness itself is not sufficient to create sexual dysfunction, a prescription drug is.

When physicians are interested in the sexual concerns and problems of male patients, they need only ask a few questions and a usually hidden world of male sexual concerns will quickly become apparent.

It is a curiosity to me, a specialist in sexual problems, that physicians are viewed by the general public as a trustworthy, knowledgeable re-

Even relatively recently trained physicians do not feel adequately prepared to respond to patients' concerns about their sexual lives. The purpose of this article is to help physicians become more knowledgeable and feel more comfortable about male sexual problems.

source of sexual matters. Most physicians, however, do not consider themselves competent in this area. It is only within the last 2 decades that medical schools have included curricular material on sexuality.

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These presentations are usually held during the preclinical years. The subject is largely forgotten when students begin their hospital work and during residency training. Few house officers have physician role models who provide evaluation and therapy for men with sexual concerns. As a result, even relatively recently trained physicians do not feel adequately prepared to respond to patients' concerns about their sexual lives. The purpose of this article is to help physicians become more knowledgeable and feel more comfortable about male sexual problems.

The Components of Sexual Life

Each man's sexuality can be clinically reduced to seven components. Three of these — gender identity, orientation, and intention — are considered the sexual identity components. An additional three — desire, arousal, and orgasm — are grouped as the sexual function components. The seventh component — emotional satisfaction — stands alone.

Table 1 — Sexual Identity

<i>Dimension</i>	<i>Psychologic Aspect</i>	<i>Behavioral Aspect</i>
Gender	Gender Identity	Gender Role
Orientation	Erotic Partner Choice	Sexual Partner Choice
Intention	Preferred Erotic Imagery	Preferred Sexual Act

The Erotic and Sexual Aspects of Sexual Identity

Sexual identity has two aspects — a subjective, psychologic, unseen realm and an objective, behavioral, visible realm. The suffix “-erotic” is used only to refer to mental phenomena that belong to the subjective, private psychologic realm, whereas the suffix “-sexual” is used only to refer to behaviors involving the self or partners. Table 1 illustrates the three components of a person’s sexual identity and the erotic and sexual aspect of each component.

When physicians are interested in the sexual concerns and problems of male patients, they need only ask a few questions and a usually hidden world of male sexual concerns will quickly become apparent.

Sexual identity poses significant problems for at least 10% of the male population. Physicians are likely to encounter specific sexual identity concerns in this order: concerns over homoerotic feelings and homosexual behaviors; abnormal intentions or paraphilias; cross-dressing; and the wish to live life as a woman. Few sexual identity problems are brought to physicians directly by patients asking for help.

They are usually elicited only through direct questioning, often in an attempt to understand a desire, arousal, or orgasmic difficulty.

Gender

Gender is the experience of oneself or another person as male or female, as masculine or feminine. It is different than “sex” which refers to the biologic distinction between females and males. “Sex” refers to bodily matters such as penis, vagina, menstruation, and ejaculation. Gender refers to the psychologic experience of these anatomic and physiologic distinctions. Gender is the first aspect of sexual identity to form and is usually demonstrable by the age of 2. Conventional people have a gender identity that follows from their biologic sex. Their erotic and sexual aspects of gender are consonant with one another, particularly for social purposes. In terms of deeply private, conscious experience, however, conventional men often sense themselves to be like the opposite sex in some ways.

Normal gender identity is recognized as (1) comfort with the body as belonging to its biologic sex and (2) interest in and comfort with what the culture labels as appropriate masculine behaviors. Private feelings of unmasculinity are a common part of the subjective lives of many men. It is important for clinicians to refuse to assume that conventional gender role behaviors predict that a person’s gender identity is likewise conventional. The major forms of gender identity problems are manifested by cross-dressing in women’s clothing —

transvestism — and attempts to live as women — transsexualism.

Orientation

This dimension begins to emerge prior to puberty and undergoes further elaboration with puberty and adolescent and young adult experiences. Erotic orientation derives from private information and, therefore, the clinician must inquire: What is your orientation? What leads you to say that? Which sex attracts you? Is this attraction exclusive? Which sex do you daydream about and use in masturbation scenarios? What has the sex been of those you have had crushes on or fallen in love with? These questions elicit an understanding of the person’s differential arousal responses to each sex. The answers enable the clinician to think of a person’s erotic orientation as heteroerotic, homoerotic, or bierotic.

Behavioral orientation is defined by the gender of a person’s partners and the ability to be aroused with them. While some men are exclusively heterosexual or homosexual, and a few are bisexual, others are only predominantly heterosexual or homosexual. Before AIDS, the major psychologic problem involving orientation was the self-hatred of adolescents and young adults over their homoeroticism and homosexual behavior. Now, concern over AIDS and grief over positive HIV status has understandably become more the focus of clinical attention.

Intention

Conventional intentions are dominated by peaceful motivations to give and receive pleasure without pain, victimization, dehumanization, or humiliation. This is sometimes summarized as peaceable mutuality. Conventional intentions leave much room for a variety of transient erotic images, experimentation, and discovery of the many ways to behave sexually. But certain sexual patterns are predi-

cated upon sadism, masochism, exhibitionism, voyeurism, or genital sex with children or upon sexual arousal that requires inanimate materials — such as, leather, silk, or shoes. These abnormal intentions are broadly known as the paraphilias and are usually treated in specialized programs.

It is important for clinicians to refuse to assume that conventional gender role behaviors predict that a person's gender identity is likewise conventional.

Sexual Function Components

The majority of male sexual problems that physicians encounter involve difficulties with one or more of the three sexual function components — desire, arousal, and orgasm.

Sexual Desire

The correct diagnosis of many sexual problems rests upon the understanding that sexual desire is the amalgamation of three conceptually separate components: sexual drive, sexual motivation, and sexual wish.

1. Sexual Drive. A brain-based generator of sexual feelings exists. Its central anatomic locus is a nucleus in the anterior medial preoptic area of the hypothalamus. This center, too small to be localized with current clinical radiologic techniques, is known as the sexual drive center in lower animals.² It has numerous connections to the limbic system and cortex. When it is surgically destroyed, animals do not behave sexually. When it is biochemically stimulated, animals behave sexually more frequently. Understanding of the neuroendocrine

factors that allow sexual drive to manifest itself in humans is still empirical, but it is clear that testosterone is necessary for sexual drive intensity. A host of drugs are known to dampen sexual drive and interfere with human sexual expression. Sexual drive is manifested by one or more of the following clinically observable subjective and objective phenomena:

- a. Genital tingling from small degrees of penile tumescence;
- b. Erotic preoccupations, fantasies, or mental rehearsals for sexual behaviors;
- c. Increased erotic responsiveness to others in the environment;
- d. Planning for and seeking sexual behaviors involving self-stimulation through masturbation or partner-related sexual activity.

2. Sexual motivation. In order to have sexual relations with a partner, men have to be willing to bring their bodies to the partner for the physical interaction. This willingness is taken for granted by most people with sexual drive. Physicians see men in two predicaments that emphasize the separateness of drive and motivation:

- a. Men who have little drive but who bring their bodies regularly to sexual interactions;
- b. Men with robust drive manifestations who will not bring their bodies to their partner.

Sexual motivation ranges between two polarities: strong motives to make love with a particular partner and strong motives to avoid lovemaking with a particular partner. In couples without sexual problems, each partner's motives to make love may change quickly in response to many current factors. In dysfunctional sexual lives, motives to avoid lovemaking often have a grip on people.

3. Sexual wish. Powerful expectations about sexual behavior exist in people apart from their experience of sexual drive and motive. These expectations reflect ideas that derive from affiliations with various

social groups — such as, age group, race, economic class, ethnic group, religious affiliation, and vocation. These many affiliations and identifications provide us with ideas that shape the expression of desire. Sexual wishes or expectations can be for or against sexual behavior.

Strong expectations can translate into a sense of entitlement to have sexual intercourse at a certain frequency. "I'm a 33-year-old normal man, and I expect to be able to have intercourse with my wife at least twice a week!" "I'm only 15 years old; I do not expect to have intercourse yet. I would like to, but I don't think I should." Age, parental relationships, church affiliation, and ethnic ideas of the importance of virginity may create a strong expectation in both sexes not to have intercourse. Middle-aged and older adults sometimes find their personal expectations to avoid intercourse ludicrously Victorian, but they, nonetheless, may initially delay a much desired experience until they think about and work through their wishes not to have intercourse outside of marriage.

The correct diagnosis of many sexual problems rests upon the understanding that sexual desire is the amalgamation of three conceptually separate components: sexual drive, sexual motivation, and sexual wish.

Sexual desire is the end product of the interaction of these three complexities: a biologic force called drive; a psychologic force called motive; and a social force called wish. When these forces all

Table 2 — Male Sexual Pathologies

I. SEXUAL IDENTITY PROBLEMS

A. Gender

1. Gender identity disorder of childhood
2. Transvestism
3. Transsexualism
4. Gender confusion
5. Low self-esteem based on gender identity inadequacy

B. Orientation

1. Confusion
2. Self-hatred on the basis of homosexuality
3. Pedophilia

C. Intention

1. Isolated single paraphilias
 - a. Sadism
 - b. Masochism
 - c. Voyeurism
 - d. Exhibitionism
 - e. Pedophilia (see Orientation)
 - f. Fetishism
2. Multiple paraphilias (more common)
3. Sexual compulsivity
 - a. Seduction of partners
 - b. Masturbation

II. SEXUAL DYSFUNCTIONS

A. Desire disorders

1. Absence or low level of drive
2. Drive without motivation for partner
3. Incompatible levels of desire with partner
4. Mutual avoidance of sexual behavior

B. Arousal disorders

1. Erectile dysfunction
 - a. Psychogenic
 - b. Organic
 - c. Mixed
 - d. Idiopathic

C. Orgasm problems

1. Premature ejaculation
2. Retarded ejaculation
 - a. Complete anorgasmia
 - b. Difficulty reaching orgasm
3. Pleasureless orgasm

point in the same positive direction, arousal can be easy. But they often conflict with one another to create a weakened desire whose comings and goings may be baffling.

Sexual Arousal

Arousal is an emotion that is triggered by erotic stimuli. As it is sustained or intensified, blood is rerouted from mesenteric storage sites to the pelvic organs. The penis elongates and becomes firm, the testes enlarge and move up to the perineum, the scrotum becomes smaller. In addition, there are early

relaxing and later tensing muscular responses, the respiratory rate changes, and transient increases in blood pressure and heart rate as arousal nears triggering of orgasm. Erectile dysfunction or problems obtaining and maintaining an erection are the most common sexual problems that men bring to physicians — particularly general physicians and urologists.

Sexual Orgasm

Orgasm is a reflexive series of preprogrammed events triggered by reaching a neurophysiologic threshold of arousal. Male orgasm

begins with a subjective state of pleasure called the stage of ejaculatory inevitability. This corresponds to the contractions of smooth muscles in the prostate, seminal vesicles, and vas deferens which fill the prostatic urethra with semen and spermatozoa. The urethra is stretched by this fluid, the external bladder sphincter relaxes, and the bulbocavernosus and ischiocavernosus muscles contract to propel the ejaculate through the penile meatus. A brief rise in heart rate (20-80 beats/minute) and blood pressure (25-120 mmHg systolic and 25-50 mmHg diastolic) occur before orgasm. Hyperventilation of up to 40 breaths a minute and carpopedal contractions may also occur.

Orgasms vary in intensity; the more intense ones may be immediately followed by a brief sleep. After orgasms, pelvic congestion is reversed. Men enter their refractory period, during which they are unresponsive to further tactile and erotic stimulation. Premature ejaculation is very prevalent but only occasionally brought to physicians' attention.

Emotional Satisfaction

Not only do men have a distinct sexual identity and a body that transports them from desire to calming orgasm, they invariably reflect on the comfort and ease with which they conduct their sexual lives and the behavior of their partners. These reflections are part of the capacity to integrate sexual life with the nonsexual relationship and expectations of what life should be. Some people are satisfied with sexually dysfunctional lives. The explanations may be that they do not know it might be considerably better, they are generally accepting people, or they weigh other factors in their lives as far more important. Similarly, people are often deeply unsatisfied with their sexual lives, although they have no sexual dysfunction. The

reasons may be that they no longer like or respect their partner, their sexual identity needs are not met by their partner, or they think other people are having more excitement and fun.

Table 2 outlines various male sexual pathologies. Each of these pathologies has a knowledge base, a differential diagnosis, and a set of ideas that form the current basis of a reasonable treatment approach.

Obstacles to Discussing Sexual Matters

One further issue needs to be ad-

ressed prior to acquiring the working clinical knowledge about identity and dysfunctional problems — talking to patients about sex. Physicians need to overcome a few personal obstacles before they can become skillful in this area: 1) they must accept the legitimacy of physician inquiry into this area of patients' lives; 2) they must be prepared to be surprised and to hear about sexual behaviors and interests of which they previously disapproved; 3) they must be reassured that a transient erotic excitement upon hearing about another per-

son's sexual behavior is not a sign of their own immorality; 4) they must be encouraged that clinical inquiry can lead to significant help for the patient; 5) they must be helped to develop a scheme for the work-up of sexual problems; and 6) they must have a trusted referral source to send patients to whose problems require more than they have to offer.

References

1. Levine SB. Sex Is Not Simple. Columbus, Ohio: Psychology Publications, 1988.
2. Swaab DF, Fliers E. Sexually dimorphic nucleus in the human brain. *Science* 1985;228:1112-1115.

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Medical Evaluation of Erectile Dysfunction

J. Maxwell White, MD

ERECTILE DYSFUNCTION is a major clinical problem. It is estimated that about ten million adult males suffer erectile dysfunction in the United States. This problem, furthermore, accounts for over 400,000 outpatient visits and 30,000 hospitalizations each year in this country alone.^{1,2}

Erectile dysfunction is generally defined as the inability to achieve and maintain a firm erection. Medical evaluation towards elucidating the etiology and initiating treatment may begin at any time the dysfunction is a significant problem for the patient. This evaluation is most appropriate, however, when the patient fails to achieve a satisfactory erection in over one half of his attempts during a 6-month period or longer. Transient situational disturbances are usually resolved by waiting the 6-month period.

This article is intended to provide the primary care physician with a brief update on our understanding of the physiology of penile erection as well as guidelines for the initial medical evaluation of a patient with erectile dysfunction. Correlation of the basic assessment

This article is intended to provide the primary care physician with a brief update on our understanding of the physiology of penile erection as well as guidelines for the initial medical evaluation of a patient with erectile dysfunction.

will be made with some of the current additional diagnostic studies and potential modern therapeutic options. The social, emotional, and psychologic aspects of the evaluation are addressed elsewhere in this issue.

Physiology of Erection

Neurologic control and integration of erectile function are

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provided predominantly via autonomic and somatic spinal pathways.³ The intermediolateral nucleus of the spinal cord at the S2-S4 and the T12-L2 levels represents the autonomic erection center. Branches of the thoracolumbar segments join the inferior hypogastric plexus and the pelvic plexus, where they are joined by branches from the sacral segments. Branches from these two plexuses travel posterolateral to the seminal vesicles and prostate as the cavernous nerves, which enter the corpora cavernosa and corpus spongiosum of the penis after passing posterolateral to the urethra through the urogenital diaphragm. The terminal branches of the cavernous nerves innervate the trabecular smooth muscle and small arterioles of the penis which are responsible for the vascular events leading to erectile functioning.

Somatic sensory input from the penile skin and glans and motor fibers to the bulbocavernosus and ischiocavernosus muscles, via the pudendal nerve, are integrated in the ventral horn of the S2-S4 spinal segments. Although the sacral spi-

nal centers exert major control over the penile vascular events of erection, the cerebral cortex and other supraspinal areas have a role in the modulation of this autonomic function.

The blood supply to the penis is provided by the terminal branches of the paired internal pudendal arteries. The terminal branches end in the arterioles and trabeculae in the erectile bodies of the penis. Resting flaccidity is maintained by autonomic adrenergic tonic discharge causing contraction of the smooth muscle in the walls of these arterioles and trabeculae. This maintains a low penile blood flow in the flaccid state. Autonomic neural stimulation at the initiation of erection relaxes the smooth muscle and allows increased blood flow into the corporal bodies with consequent lengthening and widening of the penis. Venules which normally carry blood out through the walls of the erectile bodies are compressed, thereby trapping blood within the erectile bodies. After full erection is achieved, contraction of the ischiocavernosus muscles raises the intracorporal pressure further and a rigid erection is achieved. After orgasm and ejaculation, the process is reversed by autonomic restoration of the resting arteriolar and trabecular smooth muscle tone with a resultant gradual return to the reduced arterial flow of the flaccid state. Blood is then allowed to flow out of the penis through the normal venous pathways that are no longer occluded by elevated intracorporal pressure.³

Androgens, most notably testosterone, are not essential for normal erectile function, but they enhance libido. These hormones also influence the function of the hypothalamus, an important supraspinal modulator of erection.

Medical Evaluation

History

A careful history is key in the

medical evaluation of impotence as it is with almost any medical problem. Certain diseases that place the patient at high risk for erectile dysfunction should be sought directly or the patient should be questioned about their usual or most typical symptoms.

Coronary artery and peripheral vascular diseases are among the most common causes of impotence. Impotence is also multifactorial in men with renal failure.

Many endocrinologic problems are evident during the review of the patient's history and other seemingly unrelated symptoms. Since hormonal causes of impotence are generally readily correctable, they should be discovered or ruled out early in the evaluation. Decreased libido is usually present in patients with hypotestosteronemia, but the desire to have sexual intercourse, prove one's masculinity, or please one's spouse may be so intertwined as to confuse the issue of libido. Therapy with androgens or other steroids in the past should alert the physician to the possibility of an endocrinopathy, particularly as it may relate to abnormalities of the hypothalamic-pituitary-testicular axis. A history of liver disease, particularly cirrhosis, should also raise the suspicion of altered androgen metabolism.

A history of neurologic disease or neurologic symptoms should be obtained. Patients who have had prior pelvic or retroperitoneal surgery, particularly for resection of malignancies, may have had the important autonomic innervation of the penis interrupted. Patients with lower extremity motor

or sensory deficits or abnormal perineal sensation have a more directly related complaint. Patients with known neurologic problems, such as Parkinson's disease, spinal cord injury or surgery, or demyelinating diseases, are more likely to have a direct etiology of erectile dysfunction.

The presence or absence of diabetes mellitus should be noted as an important feature of the history. Insulin dosage, duration of the disease, and degree of control are not related to the development of impotence, which eventually occurs in over one half of diabetic men. Although the etiology of impotence in diabetics is predominantly neurogenic, the cavernous arteries of the penis may show fibrotic and stenotic lesions as well. In many diabetic patients, the etiology of impotence is probably multifactorial.

Impotence is also multifactorial in men with renal failure. This problem is common in patients on dialysis and is apparently related to hypotestosteronemia, accelerated vascular insufficiency, multiple medications, and autonomic neuropathy. Successful renal transplantation restores potency in about three-fourths of these patients.⁴

Coronary artery and peripheral vascular diseases are among the most common causes of impotence. Erectile dysfunction is yet another manifestation of arterial insufficiency in such patients. Low pressure and poor arterial flow in the cavernous arteries can only partially fill the erectile bodies. This results in partial erection, early detumescence, or complete failure to achieve an erection. Retroperitoneal or pelvic vascular surgical procedures, as mentioned above, may cause neurogenic and/or arteriogenic impotence. Pelvic trauma, particularly perineal injury and pelvic fracture, may yield arterial insufficiency by direct arterial injury.⁵

Tobacco smoking, as a risk factor in coronary artery and peripheral

vascular diseases, can lead to erectile dysfunction.⁶ Cessation of smoking, furthermore, yields improved erectile function in many patients.

Medications are a common cause of erectile dysfunction. Almost all antihypertensive medications have been associated with impotence, especially methyldopa, reserpine, and clonidine. Their adverse effect on erectile dysfunction is probably due to a direct central nervous system effect with decreased libido and hyperprolactinemia.⁷ Beta-blockers and spironolactone, which causes gynecomastia in some patients, also decrease libido. Diuretics and vasodilators should not cause impotence, but lowering blood pressure in narrowed vessels to the penis may yield partial erection. Tricyclic antidepressants and monoamine oxidase inhibitors reduce libido, probably due to their anticholinergic and sedative properties. Phentiazines and benzodiazepines decrease libido because of these same properties, as well as their inhibition of dopamine receptors with resultant hyperprolactinemia.⁸

Physical Examination

In the evaluation of erectile dysfunction, the general physical examination may be more important than examination of the genitalia. A general assessment of body habitus, skin, hair distribution, and the presence or absence of gynecomastia may serve as clues to endocrinopathies. The abdominal examination should help identify scars from forgotten surgical procedures, abdominal masses and organomegaly, particularly hepatomegaly. Peripheral pulses should be assessed and bruits noted. A cursory neurologic examination should include assessment of perineal sensation and assessment of deep tendon reflexes in the lower extremities. Suspicion of abnormalities should be followed by a more thorough neurologic evaluation.

Examination of the genitalia should emphasize certain specific findings in the patient with erectile dysfunction. The erectile bodies of the penis should be palpated for abnormal induration or plaque formation, suggestive of Peyronie's disease. The size and consistency of the testes should be discerned since small, soft testes may indicate primary testicular failure and hypotestosteronemia. A testicular mass should be ruled out since some gonadal stromal tumors produce androgens and estrogens with a resultant effect on libido. Rectal examination affords examination of the prostate as well as an evaluation of anal sphincter tone and the presence or absence of the bulbocavernosus reflex. The bulbocavernosus reflex is elicited by squeezing the glans and noting reflex contraction of the external anal sphincter.

Laboratory Studies

Baseline laboratory studies should be obtained to confirm or refute the possible etiologies of erectile dysfunction noted during the history and physical examination. Additional studies, of course, should be ordered to refine the evaluation of known diseases that may be related to the impotence.

A serum testosterone, preferably drawn in the early morning when testosterone is at a peak diurnal level in most men, should be obtained in all patients at the first visit. If the testosterone is normal, further evaluation of the hypothalamic-pituitary-testicular axis is not necessary. If the serum testosterone is below normal, then a serum follicle stimulating hormone (FSH), luteinizing hormone (LH), and prolactin should be obtained along with a repeat testosterone. These studies will help determine whether the low testosterone is due to hypothalamic-pituitary failure, primary testicular failure or hyperprolactinemia, requiring further study to rule out a hypothalamic or pituitary tumor. If the serum testosterone is ele-

vated, then the possibility of hyperthyroidism should be considered.

Excess thyroid hormones cause an excess production of testosterone-estrogen binding globulin, which binds circulating testosterone. Since free testosterone is lowered under these circumstances, the pituitary gland responds with increased LH production, which increases serum testosterone above the normal range. Appropriate thyroid function studies should be obtained in patients with hyperestrogenemia. Although hyperthyroidism is related in this way to androgen production, the relationship of abnormal thyroid function to impotence is otherwise unclear.

Other laboratory studies should include a fasting serial chemistry profile, with emphasis on glucose, cholesterol, triglyceride, liver function studies, and renal function studies. Appropriate evaluation for abnormal findings should proceed before the erectile dysfunction is further evaluated.

Additional Urologic Studies

After the above data are collected, reviewed, and assessed as normal, appropriate urologic consultation may proceed if no readily correctable problems are identified. Nocturnal penile tumescence tests may have a role in some patients, but the next steps after the above initial evaluation are currently directed toward assessing the integrity of the penile vasculature and the vascular erection mechanism. Since the testing and treatment of patients with intracorporal vasodilators are relatively new, they will be discussed more thoroughly.

Valuable diagnostic and potentially therapeutic information can be gained from the direct observation of a trial intracorporal injection of a potent vasodilator (papaverine, prostaglandin E1). This simple test simulates the autonomic nerve function during normal erection.⁹ This author prefers the use of prostaglandin E1 for this test because

of its relative safety compared to papaverine or mixtures of papaverine, phentolamine, and prostaglandin.¹⁰ After intracorporal injection, papaverine may induce transient hypotension, an especially risky sequela in elderly patients, and prolonged painful erections (priapism). Furthermore, fibrosis at the injection site may occur after repeated intracorporal injections of papaverine and cause painful curvature of the shaft during the induced erection.

After discussion of the indications and injection methods, informed consent is obtained. The first injection is administered by the physician in the office. With the patient in the supine position, the distal penile shaft skin is stretched over the distal corpus cavernosum on one side and prepared with isopropyl alcohol. A one half inch long, twenty-eight gauge needle and U-100 insulin syringe are utilized to administer 10 to 15 micrograms of prostaglandin E1 into the dorsal lateral aspect of the corpora cavernosa. With a standard mixture of 20 micrograms per cc the volume delivered is only 0.5 to 0.75 cc's. Digital pressure is held briefly on the injection site, and the corpora cavernosa are then massaged to distribute the prostaglandin within the vascular spaces of the corpora cavernosa. The patient is asked to remain in the office and is examined every 10 minutes to judge his response. Patients with a normal penile vascular response will generally achieve a full erection within 10 minutes, whereas those with various degrees of arterial insufficiency will take longer to achieve an erection. Maximum response in such patients is generally achieved within 40-60 minutes and may be enhanced with self-stimulation. Those patients with severe arterial insufficiency or incompetence of the veno-occlusive mechanism may have no response

or fail to achieve more than mere engorgement of the penis with no rigidity. Patients with a good response are observed long enough to insure the beginning of detumescence before they are released. If the result is a partial erection, a second injection with a higher dose of prostaglandin E1 is often recommended several days later, since the required dosage varies greatly among patients with arterial insufficiency.

If the response to the test injection is poor, more sophisticated tests of the penile vasculature may be performed. These may include Doppler wave form analysis of the penile arteries or dynamic infusion cavernosometry and cavernosography (DICC). This latter test is based on prostaglandin E1 erection induction with intracorporal pressure measurement, cavernosal artery occlusion pressure measurements, and penile venography to document "leaks" in the veno-occlusive mechanism.

If the response is an erection that is adequate for intercourse, then the patient is instructed in self-administration techniques. The test dose that achieved a good response in the office is used initially. The patient is advised, however, that a reduced dose may be adequate as privacy and stimulation by his sexual partner augment the pharmacologic response. The goal should be the induction of an adequate erection that lasts 45-60 minutes and resolves spontaneously. The pharmacologically induced erections may remain unchanged after orgasm and ejaculation or return to full rigidity shortly thereafter. Patients are instructed in the proper handling of the prostaglandin E1 and the syringes. They may induce erections in this way safely at 2-3 day intervals. The patient is counseled repeatedly concerning the side effects, particularly priapism. An erection that lasts longer

than 4 hours or becomes painful at any time, should be reversed. Oral terbutaline is provided to the patient as an initial treatment of priapism, and this is usually successful at reversing the induced erection. Needle aspiration of the engorged corpora cavernosa and administration of intracorporal phenylephrine may be required if terbutaline fails to yield detumescence.

Therapy for erectile dysfunction will be tailored by the urologist to the goals and needs of the patient and the etiologic assessment. With the advent and success of self-injection therapy with vasodilators, vacuum erection devices,¹¹ and corrective surgery and angioplasty for vasculogenic erectile dysfunction, the placement of a penile prosthesis should be a therapeutic last resort.

References

1. National Center for Health Statistics, Nelson C, McLemore T. The National Ambulatory Medical Care Survey: United States, 1975-81 and 1985 trends. Vital and health statistics. Series 13. No. 93. Washington, D.C.: Government Printing Office, 1988 (DHHS publication no. (PHS) 88-1754.)
2. National Center for Health Statistics. National Hospital Discharge Survey, 1985. Bethesda, MD: Department of Health and Human Services, 1989 (DHHS publication no. 87-1751.)
3. Lue TF, Tanagho EA. Functional anatomy and mechanism of penile erection. In: Contemporary Management of Impotence and Infertility. Tanagho EA, Lue TF, McClure, RD (eds), Williams and Wilkins, 1988, pp. 39-50.
4. Foulks CJ, Cushner HM. Sexual dysfunction in the male dialysis patient: pathogenesis, evaluation, and therapy. *Am J Kid Dis* 1986, 8:211.
5. Michael V, Kovac J, Belan A. Arterial lesions in impotence: Phleboarteriography. *Int Angiol* 1984;3:247.
6. Condra M, Movales A, Owen JA, Surridge DH, Fenemore J. Prevalence and significance of tobacco smoking in impotence. *Urology* 1986;27:495.
7. Stevenson JG, Umstead GS. Sexual dysfunction due to antihypertension agents. *Drug Intell Clin Pharm* 1984;18:113.
8. Soyka LF, Mattison DR. Prescription drugs that affect male sexual function. *Drug Ther* 1981;9:46.
9. Gerber GS, Levine LA. Pharmacological erection program using Prostaglandin E1. *J Urol* 1991;146:786.
10. Bennett AH, Carpenter AJ, Barada JH. An improved vasoactive drug combination for a pharmacologic erection program. *J Urol* 1991; 146:1564.
11. Witherington R. Vacuum constriction device for management of erectile dysfunction. *J Urol* 1989;141:320.

The Sexual Difficulties of Women

Sandra R. Leiblum, PhD

FEMALE SEXUALITY is exquisitely complex. Although few physical factors impede a woman's ability to become aroused, achieve orgasm, and experience sexual gratification without pain or discomfort, a host of psychologic variables can, and often do, interfere with sexual response. Guilt, fear, and anxiety, as well as fears about closeness, abandonment, and dependency can inhibit sexual arousal. A history of sexual abuse can obliterate feelings of desire. Past gynecologic trauma or sexual coercion, fears, and misinformation can make penetration impossible or intercourse painful. Marital conflict or hostile feelings toward a partner can thwart even the most "technically perfect" sexual encounter.

Sexual Inquiry

Since sexual difficulties occur so frequently in women, it behooves the concerned physician to routinely take a brief sexual history in order to identify current concerns. Sexual inquiry need not be extensive. In fact, just a few questions

Since sexual difficulties occur so frequently in women, it behooves the concerned physician to routinely take a brief sexual history in order to identify current concerns.

often suffice to elicit the relevant information.¹ The physician might first ask the patient, "Are you sexually active?" If the answer is affirmative, he/she might then ask, "What sexual concerns or difficulties are you having currently?" These two questions indicate that the physician is receptive to discussing sexual issues with the patient. Elaboration and clarification of the woman's replies will provide the detail necessary to determine

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an appropriate intervention or a sensible referral.

Classification of Sexual Problems

Female sexual problems typically fall into one of four major categories: problems of desire, arousal, orgasm and pain/penetration. Each of these will be reviewed and discussed.

Problems of Sexual Desire

Problems of sexual apathy and sexual aversion are among the most perplexing of sexual complaints presenting to practitioners and appear to be increasing in the general population.² Estimates vary concerning the incidence of sexual desire disorders. In the 1970s, hypoactive sexual desire was reported to represent approximately 37% of presenting problems in sex therapy clinics, but by the 1980s, such complaints had increased significantly, to nearly 50%.³ Although the number of men complaining of low sexual desire is now not significantly different from that of women with this complaint, there do appear to

be gender differences in desire. Sexual appetite in men seems to be more insistent, invariant, and impulsive, whereas in women, sexual interest may be more intermittent and dependent on relationship factors. Women are often less aware of subjective sexual arousal, and their libido fluctuates widely, waxing and waning according to a host of biologic and psychosocial factors. Many women can adapt to a life without regular sexual activity, but then under the press of a new relationship or love affair, their sexual drive can be powerful. Moreover, some women report no internal experience of sexual desire at all.

Assessment of Desire Disorders

Assessment of sexual interest must take into account both internal feelings of desire as well as overt behavioral indices of sexual interest. Generally, it is useful to inquire about the presence or absence of sexual thoughts or images, the awareness of sexual "cues" in the environment, and the frequency of a variety of sexual behaviors, including masturbation and coitus. Sexual frequency alone is often a poor reflection of sexual interest, since so many women find it difficult to initiate sex when they are in the mood and to refuse sex when they are not.

In evaluating sexual desire disorders, it is useful to discriminate among the following possibilities:

1. Global lack of desire: The woman has rarely, if ever, experienced spontaneous sexual thoughts, feelings, or interest. Masturbation occurs rarely or never. Sexual fantasy is absent. There appears to be little "internal" drive for sexual exchange with a partner. The woman engages in sex out of a sense of guilt or to please (or keep) a mate.
2. Situational or secondary lack of desire: Sexual desire may have been present at one time or is currently present for a partner other than a spouse. Masturba-

tion may occur, and if it does, it is regarded as preferable to sexual exchange with one's partner.

3. Sexual aversion: The woman experiences a real sense of physical revulsion and anxiety at the thought or initiation of sexual activity. At times, the sexual aversion may be traced to an earlier history of sexual abuse or rape. In other instances, the etiology is unclear.

Sexual frequency alone is often a poor reflection of sexual interest, since so many women find it difficult to initiate sex when they are in the mood and to refuse sex when they are not.

4. Desire discrepancy: One partner experiences a wish for greater sexual activity than his/her mate. While neither partner is "unusual" in their sexual appetite, the discrepancy between the levels of sexual interest is creating problems for the couple.
5. Lack of desire secondary to depression: Both subclinical and major depressive disorders can dull sexual appetite. In such cases, the depression must usually be treated before the libido will return. Unfortunately, many anti-depressant medications inhibit or suppress sexual interest, so one must be careful in prescribing.
6. Lack of desire secondary to other sexual dysfunction(s): The lack of desire may be secondary to lack of orgasm, vaginismus, or dyspareunia. It is important to determine which problem came first — the lack of sexual interest, or the sexual performance prob-

lems — in order to determine treatment priorities.

7. Lack of desire secondary to medication: Many medications can interfere with sexual appetite, including some of the anti-hypertensives, neuroleptics and sedatives, tricyclic and heterocyclic anti-depressants, anticancer drugs, and alcohol — to cite just a few categories. It is essential to obtain a careful medication history so that one can determine whether the reduction in sexual drive is related to the start of a new drug regimen.

Hormones and Desires

Androgens appear to be the libido hormone for both women and men.⁴ Certainly, marked deficiencies in endogenous androgen levels are associated with diminished desire, as has been demonstrated by studies of hypogonadal males treated with testosterone therapy,⁵ and surgically menopausal oophorectomized women who have been administered exogenous androgen therapy.⁶ Research findings on the effects of hormones on sexual desire have been equivocal, however, as studies of menstrual cycle and oral contraceptive effects on sexual desire have failed to demonstrate a reliable or consistent pattern of results.

Generally speaking, estrogen replacement will not increase sexual interest in either premenopausal or postmenopausal women, although it will improve lubrication and reduce vaginal discomfort. For some women in good relationships, androgen therapy may prove helpful in stimulating sexual appetite. Most often, however, problems of desire are best dealt with by referral to a skilled sex or marital therapist.

Problems of Arousal and Orgasm

Although up-to-date community surveys of the incidence of arousal and orgasmic problems are not available, it is probably accurate to

say that anywhere between 11 and 50% of women have difficulty becoming sexually aroused and reaching orgasm during intercourse.² Nevertheless, it is equally true that most women are physically capable of reaching orgasm with the appropriate stimulation in about the same amount of time as do men.⁷ When they do not, it may be because of personal history, relationship conflicts, or simply lack of education and information about sexual matters as well as lack of appropriate stimulation.

Determinants of Female Orgasm

Physically, few conditions seem to directly interfere with orgasmic response, although there is inconsistent evidence that diabetes, spinal cord injury, and hormonal imbalance may influence orgasm in some women. Most diseases that interfere with the achievement of orgasm do so indirectly, rather than directly, through depletion of energy or depression.⁸ Women with heart or lung disease, or severe anemia may fail to reach orgasm because of the effort required and shortness of breath. Some psychotropic medications, such as monoamine oxidase inhibitors and tricyclic anti-depressants have been reported to impair orgasmic function. Other drugs that can interfere with the brain's coordination of orgasm include certain pain medications and drug abuse.

Psychologic factors, rather than physical ones, appear to be the major culprit in creating orgasmic inhibition(s). A history of depression, anxiety, body image concerns, and a conflicted couple relationship are obvious factors to assess. Is the woman obtaining sufficient and desired stimulation in the "right place" for the right amount of time in order to trigger the orgasmic reflex? Sometimes, women complaining of orgasmic difficulties are married to men who are unable to control the timing of their ejaculation and routinely ejaculate prema-

turely, before the women have had an opportunity to become lubricated or aroused. Often, too little time is spent in sexual foreplay or overall physical caressing before intercourse is begun, and the woman feels that "it's over before it has begun!"

For some women, the experience of "letting go" in orgasm is a frightening one. Fisher,⁹ a psychologist who extensively studied the variables associated with female orgasm, reported that his most consistent finding was that anorgasmic women often had experienced their early love objects, especially their fathers, as undependable. Consequently, they tended to experience their later significant love partner in a similar fashion. These women, therefore, had an increased need to control situations involving high arousal that had a potential for loss of control.

The quality of the current couple relationship is also important to assess. Not surprisingly, women in relationships characterized by hostility, power struggles, and chronic conflict are less likely to experience sexual abandonment.

Generally speaking, estrogen replacement will not increase sexual interest in either premenopausal or postmenopausal women, although it will improve lubrication and reduce vaginal discomfort.

Diagnosis and Treatment of Female Orgasmic Disorders

Women vary considerably in their ease of orgasmic attainment. Some women, about 5-8%, are to-

tally unable to achieve orgasm with any partner or type of stimulation, be it manual, oral, vaginal or intercourse. More common is the woman who is situationally orgasmic. She can achieve orgasm readily and reliably with masturbation or with oral sex, but is unable to attain orgasm via coitus. About 30-40% of women are unable to achieve orgasm without concurrent clitoral stimulation or through coitus alone. It is important to determine how active the woman is during sexual activities, since it has been established that active women are more likely to receive the kind of stimulation required to trigger orgasm. Women may need to vary their position, move their hips and buttocks, tense their bodies, or alter their breathing in order to facilitate the climb to orgasm. In order to do this, they must be knowledgeable about what "works" for them sexually, and this is best determined through masturbation practice.

It should be noted, however, that many women need encouragement and permission to engage in self-stimulation, since the idea of touching themselves sexually may seem unacceptable. Bibliotherapy and support can be helpful in this regard. After determining what kind of stimulation is effective in increasing arousal and facilitating orgasm, the woman can share this information with her lover and, hopefully, he can provide the stimulation she needs in order to climax. If she is still anorgasmic with both, masturbation and/or with a partner, referral to a trained sex therapist is indicated.

Diagnosis and Treatment of Female Arousal Problems

Although most arousal difficulties can be traced to psychologic causes such as distraction, anxiety, and inadequate stimulation, problems becoming sexually aroused are not uncommon in lactating or menopausal women. In both in-

stances, lubrication difficulties can result from diminished estrogen supply, and in the former case, from elevated prolactin levels. The peri- or postmenopausal woman may have a thin, friable vagina which makes intercourse painful and uncomfortable. The anticipation of pain is often sufficient to interfere with sexual arousal. In such instances, it is important to suggest the use of external lubricants, such as Replens, KY, or Today, or to consider the possibility of hormone replacement therapy.

In assessing the cause of arousal problems, the physician should inquire about past instances of sexual (or physical) abuse, current medications, and the general health status of the woman as well as her living situation. A new mother who is primed to listen for cries from a sleeping infant may be unable to relax sufficiently to experience sexual arousal. Similarly, a woman concerned about a teenager's arrivals and departures in a crowded household is unlikely to abandon herself to sensual exchange. It is helpful to investigate under what, if any, circumstances the patient is capable of experiencing sexual arousal as well as her theories about the cause of her sexual difficulties.

Dyspareunia

Although most female sexual complaints are not associated with specific pathologic changes on pelvic examination, this may not be true for complaints of dyspareunia. Patients who report painful intercourse often have obvious genital pathology that not only confirms their discomfort but also, after intervention, provides an objective marker to judge successful treatment.

Incidence and Prevalence of Dyspareunia

Though the prevalence of dyspareunia in the general population is approximately 20%, there is a wide variation in reported rates, from as

low as 4% to as high as 40%. Many women are embarrassed or reluctant to discuss the problem unless specific questioning is undertaken prior to or after the gynecologic exam. The prevalence of dyspareunia increases in a stepwise fashion with aging, especially during the pre- and postclimacteric years.

The cause of deep dyspareunia is often endometriosis or pelvic adhesions from prior surgery or pelvic inflammatory disease.

Causes of Dyspareunia

The location of the pain or discomfort must be determined both from interview data and from the gynecologic examination. Additionally, the physician should ask the patient when the pain first occurred, how long it persists (e.g., both during and following intercourse?), circumstances or occasions when it is absent or reduced, etc. If it is impossible to reproduce the pain during the gynecologic examination or if the patient is vague about the exact location of the pain or complains that it persists long after coitus has been completed, dyspareunia of psychogenic etiology may be suspected. On the other hand, if the pain is well-localized and described, a discernible physical cause can often be identified. One must always determine if adequate stimulation has occurred so that the vagina is well lubricated and the woman is sufficiently aroused to permit easy penetration. The cause of deep dyspareunia is often endometriosis or pelvic adhesions resulting from prior surgery or pelvic inflammatory disease. Other causes include pelvic tumors or abnormalities of the gastrointestinal or urinary tract. Superficial dyspa-

reunia can result from any disease or dysfunction of the external urogenital tract. Psychologic factors such as sexual anxiety, fears about sexually transmitted diseases (e.g., herpes, HIV), pregnancy, memories of sexual abuse, or fear of discovery may cause painful intercourse in the absence of pelvic pathology by interfering with lubrication.

Vaginismus

The woman presenting with vaginismus is often puzzling. While she may be absolutely phobic about vaginal penetration of any sort, she may be quite capable of arousal, orgasm, and sexual gratification. She may display a specific phobic reaction to the anticipation of or attempt to enter her vagina. Often the woman believes her vagina is "too small" or is extremely fearful about the threat of an unwanted pregnancy. What is so fascinating about these cases is that the woman and her partner will often delay seeking treatment for many years. Often, it is the threat of divorce or the wish to start a family that ultimately propels the patient to discuss the problem with a physician.

Incidence and Prevalence

Population figures on incidence and prevalence of vaginismus in the general population are not available, although the problem probably occurs with greater frequency than is documented. Women with partial vaginismus are reluctant to report it and often couples collude in keeping the shameful secret of their nonconsummated marriage. Patients with vaginismus often present with non-specific genital complaints such as vaginal burning, itching, irritation, pressure, infection or urinary complaints such as frequency, urgency, or dysuria. For both dyspareunia and vaginismus, a history of previous sexual abuse or trauma should be explored.

The genital examination for

women complaining of dyspareunia or vaginismus must be undertaken with special sensitivity and care. The woman must be reassured that any complaints of pain or discomfort will be immediately heeded, and the examination will be temporarily suspended until the cause of her pain is identified. During the exam, the woman should be provided feedback concerning physical findings. It is especially important to reaffirm normalcy, especially in women who fear they have genital abnormalities or cancer. It is helpful if a woman is given a mirror and is instructed about genital anatomy during the genital examination.

Treatment of both vaginismus and dyspareunia is often successful with a program of relaxation, deep breathing exercises, and the gradual insertion of objects of increas-

ing size (e.g., fingers, tampons, dilators) under conditions of relaxation and patient control. Where physical pathology exists, it must, of course, be corrected. The reminder to use external lubrication during dilator or penile insertion is important.

Summary

Despite the fact that women are susceptible to experiencing a wide variety of sexual difficulties and complaints during their lifetime, it is also true that women are sexually resilient and are capable of satisfactory sexual response throughout their life cycle. Often, permission and reassurance, coupled with sensible suggestions are sufficient to overcome bothersome sexual difficulties. When this is not helpful, referral to a well-trained sexual or couples' therapist is indicated.

References

1. Bachmann G, Leiblum S, Grill J. Brief sexual inquiry in gynecologic practice. *Obstet Gynecol* 1989;73:425-427.
2. Spector I, Carey M. Incidence and prevalence of the sexual dysfunctions: a critical review of the empirical literature. *Arch Sexual Behavior* 1990;19:389-398.
3. LoPiccolo J, Friedman J. Broad-spectrum treatment of low sexual desire: Integration of cognitive, behavioral, and systemic therapy. In: Leiblum SR, Rosen RC (eds.) *Sexual Desire Disorders*. New York: Guilford Press, 1988, pp 107-144.
4. Bancroft J. *Human Sexuality and its Problems*. Edinburgh: Churchill Livingstone, 1983.
5. Bancroft J, Wu F. Changes in erectile responsiveness during androgen therapy. *Arch Sexual Behavior* 1983;12:59-66.
6. Sherwin B, Gelfand M, Brender W. Androgen enhances sexual motivation in females: a prospective, crossover study of sex steroid administration in the surgical menopause. *Psychosom Med* 1985;47:339-351.
7. Kinsey AC, Pomeroy WB, Martin CE, Gebhard PH. *Sexual Behavior in the Human Female*. Philadelphia, WB Saunders, 1953.
8. Levine SB. *Sex Is Not Simple*. Columbus, Ohio: Psychology Publications, 1988.
9. Fisher S. *The Female Orgasm*. New York: Basic Books, 1973.

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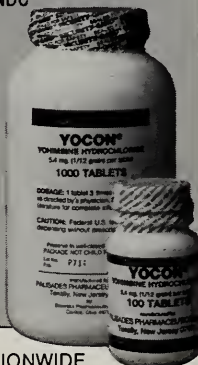
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References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Hormones, Behavior, and Sexuality In Women

Anthony E. Karpas, M.D.

Introduction

The effect of hormones on moods and behavior in women has been a subject of speculation for most of known history. The ancient Greeks thought the womb was the seat of the emotions thus the term hysteria from hysteris or womb. Lunatic was used to describe abnormal behavior and probably derives from the lunar, i.e. 4 weekly occurrence of the menstrual cycle.

The ovary at birth has about a million follicles. About two thirds of these are used up by the time of puberty. As the follicles develop one becomes the dominant follicle and secretes an inhibitory factor which prevents the development of an ovum in the other 40 or 50 follicles that have been recruited. These non-dominant follicles are important as they supply hormonal support to the dominant follicle. Follicle development is under control of follicle stimulating hormone (FSH) secreted by the pituitary gland.

Two cell lines develop in the follicles in addition to the ovum.

The role of hormones in the sexual function and psychological makeup of women is important. . . . More research is required to ratify or disprove many of the speculative assertions in the literature.

These cells are under the control of luteinizing hormone (LH) and secrete androstenedione, a weak androgen. This is converted into estradiol in the Granulosa cell under the influence of FSH. Peripheral conversion of androstenedione to testosterone and estrone also occurs. Both LH and FSH are secreted in a pulsatile fashion. The amplitude and frequency of the pulses vary with the time of the cycle. Estrogen initially has increasingly a positive

feedback effect on the pituitary gland, FSH and LH production. At higher levels the effect of estrogen is inhibitory. By increasing the LH to FSH ratio, more androgen and less estrogen would be secreted.

The ovulatory cycle starts as the dominant follicle is selected and enlarges, while the theca and granulosa cells multiply. As estrogen levels rise the pulses LH and FSH increase in frequency, amplitude and duration. At about 14 days into the cycle, a surge of LH and FSH takes place which ruptures the follicle and releases the ovum. The follicle now forms a corpus luteum and secretes progesterone as well as estrogen.

Other pituitary hormones are also involved with this process; Prolactin effects gonadotropin production, breast glands, and ovarian cells; thyroid hormone and insulin both affect the ovary and the pituitary gland.

The adrenal gland is important in sexual development and may be involved in ovarian function. Both the ovary and the adrenal gland are responsible for androgen production. The adrenal gland is responsi-

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ble for initial pubertal development at 8 to 9 years old, thought to result from a specific adrenal androgen stimulating hormone.

The androgen produced by the adrenal, dihydro epiandrosterone (DHEA), is slightly different from that produced by the ovary but can also be converted to testosterone and estradiol. The adrenal gland is responsible for the majority of post menopausal sex hormone production.

A fairly common enzyme deficiency known as partial 21 hydroxylase deficiency may occur in as many as 1 in 30 of some ethnic groups. This 21 hydroxylase is one of the enzymes involved in the conversion of progesterone to cortisol in the adrenal gland. A partial deficiency of this enzyme results in an excess of DHEA and decreased deoxy cortisol (DOC) production, the so called sodium losing form of congenital adrenal hyperplasia. Another enzyme deficiency syndrome, 11 hydroxylase is 10 times more rare and can lead to the hypertensive salt retaining form of excess androgen production.

Prolactin has a profound negative effect on sex drive. Patients with prolactin-producing adenomas complain of this, even when ovarian hormones are replaced.

The more severe forms of adrenal hyperplasia produce masculinization of the genitalia in infancy. Less severe forms produce premature maturation with advanced bone age and premature puberty, and acne, hirsutism and cystic ovaries in the 2nd and 3rd trimesters of life. The peripheral conversion of the weak androgens secreted by

the adrenal gland causes an increased LH to FSH ratio, and results in additional androgen production by the ovary. This excess androgen interferes with the ovulatory process and causes menstrual irregularity.

The prolonged follicular phase and shortened luteal phase associated with this condition has been well described by Steinberger et al.¹ The luteal phase deficiency can be an important cause of infertility; premenstrual stress may also result from deficient progesterone secretion as do ovarian cysts and endometriosis. Suppression of the adrenal gland with glucocorticoids was described in the early 1950s to reverse this syndrome. It has also been postulated that the adrenal androgen stimulating hormone found by Odell et al.² may not turn off, resulting in the excess androgen production and temporary use of corticosteroids may offer a permanent solution.

Hormones and Sexuality

The effects of hormones on sexuality start in early fetal life. Prior to 12 weeks of gestation follicles formed at the genital tubercle migrate to the fetal ovary. This is possibly controlled by the action of human chorionic gonadotropin (HCG) from the maternal ovary. In rat studies, exposure to androgens at this early stage of development will result in a male sexual behavior pattern, for example, mounting behavior usually only seen in males. The effect of excessive androgens in the female human fetus is unknown. Certain progestins are modified androgens. The 19-nor compounds are commonly used in birth control pills. The effect of these on the sexuality of the female fetus (if a woman were to become pregnant during or immediately after discontinuation of the more androgenic pills) has not been studied.

The question of whether genetics, hormones or environment de-

termines sexuality in humans has not been answered. Hormones produce profound behavioral effects on the brain. The effects of the absence of estrogen in women following surgical castration is well documented. Multiple symptoms both somatic and psychological have been described; hot flashes, mood swings, depression, loss of sex

Relief of the psychologic symptoms of menopause correlates well with suppression of gonadotropins, although different estrogens may also be required.

drive, and loss of short term memory. Migraine headaches, vaginal dryness, skin and hair dryness, osteoporosis and premature heart disease are all consequences of estrogen deficiency.

Animal studies have shown that a deficiency of estrogen results in a deficiency of serotonin in the brain and changes in norepinephrine levels. A recent study done in my practice showed improvement in anxiety, paranoid ideation and depression in women receiving estrogen replacement. A frequent complaint following castration in women is the disappearance of sex drive. Estrogen replacement alone does not seem to help, but treatment with testosterone alleviates the problem. Clearly then testosterone, the major sex stimulant in males, is also important in females, and most women with this condition do well on a conjugated estrogen-testosterone combination (1.25 estrogen and 2.5 mg testosterone). The use of depot testosterone injections, 50 to 75 mg is commonly

used. This dose repeated frequently can cause masculinization, however, the use of testosterone 75 mg pellets subcutaneously every 4 months will adequately treat most patients with minimal masculinization side effects.

This requirement for male hormones in postmenopausal women is in contradistinction to the deleterious effects of increased male hormone levels in premenopausal women. This apparent contradiction can be explained by taking other hormone systems as a comparison where too much is as problematic as too little.

The physiologic role of male hormones in women has at times been a topic of great controversy. The major product of the ovary is androstenedione. While this is a weak androgen and serves mainly as a substrate for estrogen production it may have physiologic significance. Since androgens administered at menopause appear to increase sexuality, could this hormone have the same role? The drop in sex drive frequently associated with oral contraceptive use, could be due to suppression of this hormone. An increase in sex drive around mid cycle would be caused by an increase in ovarian androgen output accompanying the increased estrogen production.

A rare group of families has been found to have a deficiency of adrenal androgen production. In treating one of these families, a major symptom was their lack of sex drive. The relationship between adrenal and ovarian androgens is not clear but this family also had decreased ovarian androgen production. A major decline in androgens occurs at menopause occurs both in the adrenal and ovary. The relationship between these is not clear.

Prolactin has a profound negative effect on sex drive. Patients with prolactin producing adenomas complain of this even when ovarian hormones are replaced. An

increase in prolactin production frequently accompanies hyperandrogenic states in women, perhaps explaining why an increased sex drive is not frequently observed in these patients. Most antidepressants cause a marked increase in prolactin production. It is unknown if this is the cause of the decreased sexuality in these patients. Bromocriptine which lowers prolactin levels has been shown to improve sexuality in renal failure cases with increased prolactin levels. Often the symptoms of nausea and dizziness which accompany this drug outweigh any increased sexuality.

A complaint a number of women have had is a decrease of clitoral sensitivity. Testosterone administration has been used to increase the size and sensitivity of the clitoris. A safe and effective way of doing this is the use of testosterone cream to the clitoral area.

The ability of women to absorb and metabolize oral hormones is quite variable. Despite large elevations of estrogen levels with some agents, FSH and LH levels do not suppress much. Relief of the psychological symptoms of menopause correlates well with suppression of gonadotropins, although the use of different estrogens may be required.

Women who have been castrated at a young age seem to metabolize estrogen more rapidly. Ethinyl estradiol, which is not broken down by the liver, is often useful if conjugated estrogens do not work well. Occasionally it is necessary to use parenteral estrogens. One method that seems to be superior is the subcutaneous implantation of estradiol pellets. This method is currently under investigation for hysterectomized women but is not recommended for women with an intact uterus.

The use of progestational agents for women with an intact uterus has been generally accepted by the medical profession, if not the FDA. Progestins have the property of lu-

teinizing the endometrium and causing it to shed. The cancer preventing properties of regular monthly progestin therapy has been well documented, however, progestins unfortunately also cause many of the same symptoms as premenstrual stress, such as bloating, fluid retention, breast tenderness, mood swings and depression. It is worth adjusting the dose or the type of progestin used in order to minimize these problems; medroxyprogesterone 10 mg for 12 days; norgestrel 5 mg for 12 days; medroxyprogesterone 2.5 mg continuously have all been advocated.

Women whose ovaries have not been removed will continue to secrete testosterone for some time after menopause and may not have quite as severe loss of sex drive and vaginal dryness. This is because some theca cells may remain viable even in a menopausal ovary, so some women may continue to produce hormones for several years. It is not uncommon for the more severe symptoms of menopause to first appear in the mid to late 60s.

The use of progestational agents for women with an intact uterus has been generally accepted by the medical profession, if not by the FDA.

Women who have had their uterus removed and their ovaries conserved may still suffer from premature menopause due to a loss of blood supply to the ovaries. Symptoms of menopause in these patients should be evaluated with LH, FSH and estradiol level obtained.

Premenstrual Stress

Premenstrual stress is an often ridiculed subject. The existence of this problem has been denied by

feminists and used as an excuse to prevent promotion of women in the work place by sexists. The ability to reproduce the symptoms in the menopausal women should lend credence to its existence.

The cause of premenstrual stress is unclear and its symptoms are variable.³ Physical symptoms have been blamed for the psychological problems. The existence of premenstrual pain was sneered at as a lack of fresh air and exercise until recently. The Laparoscopic exam and the subsequent description of the frequency of endometriosis have laid those doubts to rest.

Pain and abdominal bloating are a frequent symptoms of endometriosis as is dyspareunia or pain with intercourse. Dyspareunia is felt deep in the abdomen unlike vaginismus, which is at the vaginal opening and is thought to be psychological. Vaginismus frequently occurs as a result of sexual trauma or a morbid fear of sex.

There seems to be a common but not inevitable link between physical and psychological problems during premenstruation. Psychological symptoms include irritability, crying, paranoid ideation, sleeplessness, panic attacks, mood swings, loss of memory and depression. Studies have also shown underlying bipolar disorders and other psychologic dysfunctions. I have used the phrase the great amplifier PMS, will often exacerbate underlying psychiatric disease.

Premenstrual syndrome (PMS) has been terminated by the use of super active gonadotropin agonists to suppress the pituitary gland. This would indicate that some biochemical change was in fact taking place in the brain. This negative effect has been blamed on progesterone excesses as well as progesterone deficiency. While the treatment of PMS with large doses of progesterone has been advocated in the lay press it has never been proven in a double blind study to be effective. I

have seen patients who have taken progesterone enemas or sublingual sprays without effect.

Nutritional cures abound and vary from primrose oil to mega doses of vitamins. These have equally poor results in double blind testing. The concept of suppression

The immature hypothalamic cycle of puberty and the failing ovary of the climacteric are the most common phases of reproductive in which PMS occurs.

of the menstrual cycle seems to be one that works. Studd et al.⁴ have used estrogen implants to suppress the menstrual cycle with success. Steege⁵ at Duke Medical Center report on the use of GNRH depot agonists and estrogen replacement. All these methods including the use of oral contraceptives and depot medroxyprogesterone are effective, as long as the cycle is suppressed.

Many progestational agents cause PMS symptoms. Different progestational agents work differently in different women. The agents currently available in the United States include medroxyprogesterone acetate, nolutate and micronor. The use of these cyclically with ethynal estradiol 0.05 mg has been effective in most cases where patients were unable to tolerate birth control pills. Occasionally micronised progesterone has also been used. This form of progesterone has not been approved by the FDA however it is available as a formulated compound, but when used care must be taken to measure progesterone levels to make sure patients are absorbing it.

The physical problems associated with dysmenorrhea are usually effectively treated with low dose of birth control pills or, cyclic proges-

tins. Laser surgery or GnRH agonists are effective in treating dysmenorrhea caused by endometriosis. The bloating appears to be caused by an excess of renin substrate and diuretics which block aldosterone at the level of the renal tubule (spironolactone) are effective treatment agents.

The most common incidence of PMS appears to be at the beginning and end of reproductive life. Clearly an absence of ovulation would not cause PMS. Factors associated with a defective luteal phase cycle such as excess androgen production described above as well as hyperprolactinaemic states have been implicated. Hypothalamic and pituitary dysfunction from almost any cause could be responsible. Emotional, physical and nutritional stress all are also factors. The immature hypothalamic cycle of puberty and the failing ovary of the climacteric are the most common phases of reproductive life in which this syndrome occurs.

A form of depression perhaps related to PMS is post partum depression. This problem may be severe and occurs in the immediate post partum period and up to several months after delivery. A profound depression and fatigue are its most common symptoms. My personal experience has been that a great many of these patients have clinically evident or subclinical hypothyroidism. A TRH test with hyper-response of TSH is often necessary to make the diagnosis. Often however the cause is not obvious and psychiatric care may be critical.

The incidence of hypothyroidism in women approaches 5%. A lack of energy, weight gain, and depression should all be clues in premenopausal women. Because estrogen raises thyroid binding globulin, the standard thyroid tests may be normal and more sophisticated tests such as free T4 and sensitive TSH must be used. When menopausal patients do not appear to be responding to adequate estro-

gen therapy hypothyroidism should be ruled out.

Summary

Many hormones are involved in the control of human sexuality. Clearly both androgens and estrogens are important parts of the picture. The physiologic role of prolactin, thyroid hormones and gonadotropins is not clear. The part played by neurotransmitters can only be guessed at.

The neuroendocrine interaction governing female sexuality is far less understood than in the male. For example while there is a loss of tumescence in the vaginal tissue in diabetic females there is no loss of sexual function as in the male. The effects of deletion and addition of sex steroids in the female are far less predictable than in the male. Environmental and psychosocial factors are probably more important in the total picture.

The role of hormones in the sexual function and psychological makeup of women is important. The exact role of the endocrine system in their psychosexual function is by no means clear. A great deal of research is required to ratify or disprove many of the speculative assertions found in today's literature. Studies of female sexuality would seem to have acquired a new urgency. Too often attempts at such serious study is met with a snicker and little or no funding is forthcoming. Unfortunately we know more about the sexuality of most animal species than our own. We have to take the study of female sexuality far more seriously to solve these problems.

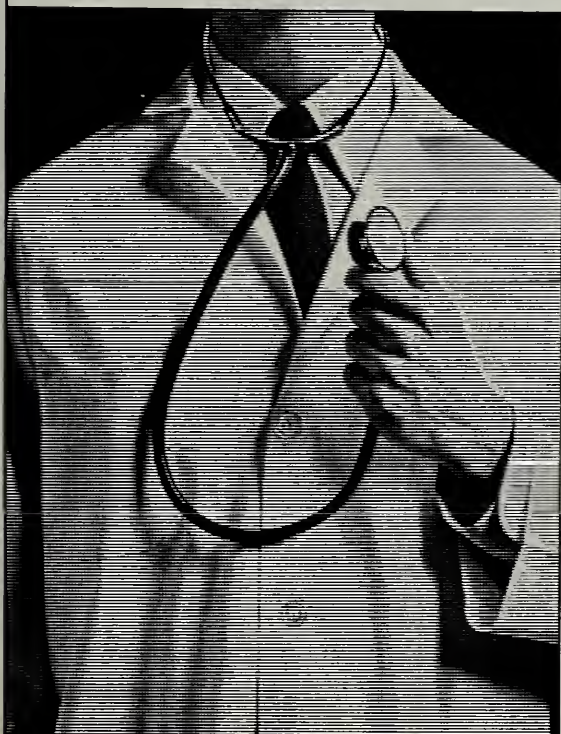
References

1. Karpas AE, Rodrigues Rigau LJ, Smith KD, Steinberger E. Effect of acute and chronic androgen suppression by glucocorticoids on gonadotropin levels in hirsute women. *Clin Endocrinol Metabolism* 1984;59:780.
2. Odell WD, Parker LM. Control of adrenal androgen production. In: Genazzi, Thyssen, Siiteri ed. *Adrenal Androgens*. New York: Raven Press; 1980:27-42.
3. Gise LH, Hathan GK, Berkowitz RL (eds). *The Premenstrual Syndrome*. In: Gise LH, Hathan GK, Berkowitz RL ed. Churchill Livingston Publication; 1988.
4. Studd J. The use of Estradiol pellets in suppression of the premenstrual syndrome. Presented American Fertility Society, 1991.
5. Steege JF. Evaluation and treatment methods used at the Duke University Medical Center PMS Clinic. *The Premenstrual Syndrome*, In: William R. Keye, Jr. ed. Saunders Publ; 1988; 184.

Suggested Readings

- Greenblatt RB. Cortisone in the treatment of hirsute women. *AM J Obstet Gynecol*; 1953;4:49.
- Greenblatt RB, Natrajan PK, Karpas AE. The Endocrine and Reproductive Systems of Aged Women. *The Physical and Mental Health of Aged Women*. In: Haug M, Ford AB, Shear M eds. Springer Publication; 83-100.
- Greenblatt RB, Mahesh VB, Gambrell RD. Unwanted Hair Its Causes and Treatment. In: Greenblatt, Mahesh eds. Parthenon Press, 1985.
- Nachtigall L & Heilman JR. *Estrogens*
- Rodriguez Rigau LJ, Smith KD, Tcholakian RK. Effect of plasma testosterone levels on duration of phases of the menstrual cycle in hyperandrogenic women. *Ferti Steril*; 1979; 32:408.
- Virendra B, Mahesh R, Greenblatt B. Hirsutism and Virilism. In: Virendra, Mahesh, Greenblatt eds. Wright PSG Publication; 1983.

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Evaluating Couples for Sex Therapy

William C. Talmadge, PhD, Lynda Dykes Talmadge, PhD

WE BELIEVE all primary health care physicians can assist their patients by routinely inquiring about the patient's marital and sexual health. This serves notice to the patient that their physician is someone whom they can comfortably approach about this area of their life should problems arise. In discussing the elements we consider crucial to our assessment of couples presenting to us for sex therapy, we realize the circumstances of the medical practitioner do not afford adequate time or sufficient access to both partners to completely assess the couple. However, a broader understanding of the issues in evaluation will allow the physician to be more effective in his or her preliminary assessment for treatment or referral. The purpose of this article, then, is to assist the physician in evaluating a couple for possible referral for sex therapy.

Sex therapists generally agree that the best treatment approach to resolving a sexual dysfunction is to work with the couple. Sexual relating is interpersonal behavior. Sex-

A broader understanding of the issues in sexual evaluation will allow the physician to be more effective in his or her preliminary assessment of patients for treatment or referral.

ual expression occurs within the context of a relationship. The sex therapist must be knowledgeable about the dynamics of intimate relating in order to diagnose and treat sexual dysfunctions. How well or poorly a couple functions sexually correlates with their achieving a level of intimacy that satisfies the minimal needs for closeness of each partner. For example, it may be that the couple who complains

of infrequent sexual intercourse in which the husband often loses his erection are highly antagonistic to one another. In evaluating a couple, the therapist is assessing how and to what degree the couple's relationship affects their sexual problem as well as how the sexual problem affects the relationship.

However, the couple often does not perceive the sexual symptom in the context of their relationship. Instead, they present the problem as that of the "symptomatic" spouse, somehow related to personality defects or physiologic abnormalities. The sexually dysfunctional couple often perceives the sexual symptom as a disembodied phenomenon coming out of nowhere. The sex therapist must educate them as to the contexts, relational and otherwise, which influence the symptoms. For example, more often than not, the couple presenting with low sexual desire on the part of one partner will say, "Everything else between us is great. We never argue, and we are happy. We just don't understand why he/she doesn't want sex."

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These contexts in which the problem flourishes are the object of scrutiny during the evaluation.

Five Areas of Assessment

In evaluating a couple for sex therapy, five areas are important for the roles they play in the sexual problem.

Physical State

What are the possible physiologic components which may be involved in the sexual problem? Have there been any significant changes in the patient's health which would account for the sexual problem? For example, with the man who complains of little sexual desire and fatigue, a deficiency in thyroxin may be found. Evaluating the physical state requires a physical examination by the primary care physician and, depending on the specific problem presented, a more in-depth assessment in the areas of urology, gynecology, or endocrinology.²

Overt Sexual Behavior

What is the sexual problem? What specifically happens in the sexual interaction? The following describes one such sexual scenario. The male initiates sex. During foreplay he has an erection. He penetrates using the missionary position. However, after a short period of brief thrusting he loses the erection. They both become frustrated and disengage. She expresses to her husband that she thinks he must not love her. He becomes more frustrated and anxious because, if this problem occurs in the future, he knows his wife will think he does not love her. He begins to worry about whether or not he will be able to keep his erection the next time they have sex. In this example, the interaction between the overt sexual behavior and the couple's relationship is evident.³

Interpersonal Relationship Issues

What are the noticeable issues

the couple has in relating which may contribute to the sexual difficulty? Their communication patterns both verbal and non-verbal are being monitored in the conjoint interview. For example, during a conjoint interview with the couple where he lacks sexual desire, it is observed that she verbally dominates the interview. When he tries to express his impressions, she verbally cuts him off. Eventually, he withdraws and disengages, gazing out the window with a disinterested look.

Sexual therapists generally agree that the best treatment approach to resolving a sexual dysfunction is to work with the couple.

Intrapsychic Issues of the Individuals

This is an assessment of the primary emotional issues of each individual which may contribute to the problem. For example, in the above case, throughout the interview, it is observed that the wife is a highly anxious person, while her spouse seems to lack confidence. In the more in-depth clinical interview, each individual's history would be explored to ascertain the origins and dynamics of her anxiety, his lack of confidence, and how specifically these issues interact within their sexual problem.

Sexual Attitudes, Values, and Knowledge

During the interview process, the patient is constantly expressing attitudes, values, and knowledge about sex in the manner in which he or she describes the problem and addresses the clinician's questions. The clinician is evaluating how these attitudes, values, and

knowledge may be contributing to the problem. For example, the woman who has pain with intercourse appears uncomfortable discussing her sexuality. She will give both verbal and non-verbal cues. When she is questioned, she frequently tells her husband, "You tell the doctor what happens." She may look down or turn away. Later she directly explains, "I don't like talking about this stuff." In a more thorough evaluation with a sex therapist, the patients are often asked to complete an assessment questionnaire such as the Sexual Function Questionnaire for Heterosexuals⁴ or The Derogatis Sexual Functioning Inventory⁵ which more formally covers this area.⁶

The Process of Assessment

With any presenting sexual dysfunction, it is extremely important to take a thorough developmental sexual history and a sexual problem history. When possible, the clinician spends time with the couple conjointly and time alone with the individuals.

Developmental History

It is during the individual interview that the developmental sexual history is taken. The developmental history is not an area which the physician will be inclined to explore. However, it is briefly mentioned here to make the reader aware of content areas which are important. The developmental history includes important events in the individual's social/sexual experiences which could have helped shape the current problem. Content areas include significant family problems such as alcoholism or infidelity, first sexual experience, the sexual attitude and climate within the family of origin, and how sexual information was expressed in the family. The sex therapist will typically take an in-depth family of origin history. The physician with limited time will not be able to get great detail, but may want to ask

such questions as, "How does this sexual relationship compare to others you may have had? What are the differences and similarities in your opinion?". This inquiry helps to determine if the presenting problem has been chronic or is more situationally specific.

The individual interview is the most respectful approach to such information because the clinician has no way of knowing what parts of one's social/sexual history have been shared with the partner. This is especially important with sexual abuse survivors, because it is crucial they not feel intruded upon or violated in the sexual area.⁷ When couples have sexual problems, they are typically already defensive and tense about their sexual issues with each other and frequently have a well established, rigid, destructive cycle around their sexual relating. This makes it very difficult to get an accurate picture of each person's perception of their situation conjointly, since defensiveness in the partner's presence often prohibits full disclosure. This individual interview can be a time when infidelity, drinking problems, or past childhood physical and/or sexual abuse may be more comfortably revealed about the self or the partner.

Problem History

For purposes of referral, this level of information is most important. It is quite helpful to assess this aspect in a conjoint interview. In inquiring about the history of the problem with both partners present, the clinician is seeking each partner's perception of the problem. For example, while the man who is having a secondary erectile problem is worried about his erection, his wife may see the problem as her husband not finding her sexually appealing, not loving her anymore. When it is not possible to meet with the couple conjointly, questions about the absent spouse's perceptions and reactions should be

asked of the one present. Admittedly, this information is more apt to be distorted because it is the partner's perception of the absent spouse, not his or her actual report. Nevertheless, this line of questioning does bring in the relationship, at least as it exists in the psyche of the patient, before you.

A problem history consists of four parts: (1) description of problem; (2) onset and course of problem; (3) cause and maintenance; and (4) attempted solutions. The clinician is clarifying the natural history of the problem as it reflects and affects the dynamics of the couple's relationship, keeping in mind the physiologic, attitudinal, behavioral, emotional, and interpersonal components previously mentioned.

1. Description of Problem. The clinician should try to get the problem described in behavioral terms, rather than using jargon or diagnostic categories which the patient may not understand. It is helpful to use the patient's terminology once it is ascertained. The therapist must find out what happens between these two people sexually, which may require asking some specific questions about their sexual interaction. Some examples are, "How do you begin a sexual interaction, who initiates it, how long does it last, do you have intercourse, what do you do to lead up to intercourse," etc.? The following dialogue illustrates this approach.

Doctor: Tell me about the problem.

Patient: Well, I just don't seem to be interested in sex like I was before our baby was born.

Doctor: Well, what do you think the problem might be?

Patient: Since little Jimmy was born, John and I are going in different directions. You know the baby was sick in the beginning and John and I just seem to argue more than we used to. He tells me I'm frigid,

and he can't understand what's happened to me. He just seems to get mad a lot and then I cry.

Doctor: What usually happens during sex?

Patient: During sex it's pretty much OK except I'd like things to be a little slower with more holding and touching. The main problem is I just don't really want to have sex much.

Doctor: What do you mean you'd like it to be slower?

Patient: Oh, John just seems to be in such a hurry. He's usually finished before I get started.

The above brief interview excerpt gives a wealth of specific information about how the patient sees the problem. She alludes to lack of desire, possible premature ejaculation, marital distress, her view of her husband's perception of the problem as her frigidity, and her own perception. Patient questionnaires may help the clinician who is inexperienced in sex therapy or uncomfortable with such sexually explicit communication to focus on the relevant questions. Alternatively, they may be given to the client and then used by the clinician to follow-up on areas of interest.^{4,6,8}

2. Onset and Course of Problem. The therapist must determine what, if any, physiological conditions affect the sexual symptom. It is helpful to know if the problem began suddenly or if there was a gradual onset of the problem, whether or not the problem has steadily worsened, or whether there have been periods of remission and pleasurable sex interspersed with problematic periods during the course of the problem. In the above example, the onset is after the birth of their child. Physiologic and interpersonal considerations would need to be explored. The clinician is trying to determine the confluence of psychologic, in-

terpersonal, and physiologic events and their relative importance in causing and maintaining the problem. Important psychologic and interpersonal events include births, deaths, employment changes, divorce, children leaving home, etc. Important physiologic events may include alcohol and drug use, medications, pregnancy and childbirth, menopause, aging, and/or disease processes. Sex therapists have abandoned the notion that sexual problems are either physiologic or psychologic. Instead, we need to focus on how these realms have been interacting within the individual and within the relationship.

3. Cause and Maintenance. It is important to ask patients what they think enables the symptom to continue. The clinician may want to ask this question both in a conjoint interview and in individual interviews with each partner. The answers may vary depending on these contexts. From the above example, the doctor would hypothesize that the level of marital distress keeps the lack of desire going.

If one cannot get the patients to directly address the cause and maintenance of their problem, the clinician may want to ask such questions as "What makes it better?" or "What do you think would make it better?" or "What seems to make it worse?" The clinician should be listening for physiologic, emotional, attitudinal, and interpersonal levels of involvement. Obviously, all the lines of inquiry from description of the problem to its onset and course are attempts to discover cause and maintenance, but this more direct questioning of the patient's perceptions and observations is an important additional level of information.

4. Attempted Solutions. Explore what the patients have tried both on their own and in previous treatment in order to solve the problem. This is a significant ques-

tion because the clinician wants to benefit from past experience and past mistakes. Not only does the clinician want to know what the previous treatment and outcome was, but also how each partner perceived the process and how each feels about it. This will give the clinician more information about how to approach the couple, as well as what to avoid. The clinician does not want to add to the couple's sense of failure, and wants to make a referral the patients will accept.

Many couples report that they have tried romantic evenings and vacations with varying degrees of success, but simply cannot maintain these positive interactions on a day-to-day basis. The clinician wants to spare him or herself the embarrassment of offering such simplistic solutions as the above or "Just relax" if they have been tried to no avail. In addition, there is valuable information in their responses to such questioning relative to their level of awareness, distress, and readiness for further treatment.

Referral to Sex Therapy

In some cases, the doctor can give information and make specific suggestions which will often alleviate the patient's problem. A list of quality self-help books is contained in Appendix A. In more complex cases, the physician may want to refer the couple to a specialist. In referring the couple to a sex therapist the physician can assist the patient(s) in accepting the referral by offering information about the therapist and his/her therapeutic approach. Familiarity with the therapist of choice helps the patient accept the referral.

Appendix A — Selected Readings

1. Barbach LG *For Yourself*. New York: Doubleday, 1975.

2. Bing E, Colman L. *Making Love During Pregnancy*. New York: Bantam Books, 1977.
3. Butler RM, Lewis ME. *Sex After Sixty*. New York: Harper and Row, 1979.
4. Calderone MS, Johnson EW. *The Family Book About Sexuality*. New York: Harper and Row, 1981.
5. Friday N. *Forbidden Flowers*. New York: Pocket Books, 1975.
6. Friday N. *Men in Love*. New York: Delacorte Press, 1980.
7. Friday N. *My Secret Garden*. New York: Trident Press, 1973.
8. Heiman J, LoPiccolo L, LoPiccolo J. *Becoming Orgasmic: A Sexual Growth Program for Women*. Englewood Cliffs, New Jersey: Prentice-Hall, 1976.
9. Hite S. *The Hite Report*. New York: Macmillan Publishing Company New York, 1976.
10. Hite S. *The Hite Report on Male Sexuality*. New York: Knopf, 1981.
11. Kelly GF. *Learning about sex: The contemporary guide for young adults*. New York: Barron's Educational Series, Inc, 1976.
12. Levine SB. *Sex Is Not Simple*. Columbus, Ohio: Ohio Psychology Publishing Company, 1988.
13. Maltz W, Holman. *Incest and Sexuality: A Guide to Understanding and Healing*. 1987.
14. Mayle P. *Where did I come from?* New York: Lyle Stuart, 1973.
15. Mayle P. *What's Happening To Me?* New York: Lyle Stuart, 1975.
16. McCarthy B, McCarthy E. *Female Sexual Awareness: Achieving Sexual Fulfillment*. New York: Carroll and Graf, 1989.
17. McCarthy B, McCarthy E. *Sexual Awareness: Sharing Sexual Pleasure*. Baltimore: Carroll and Graf, 1984.
18. Scheingold LD, Wagner NN. *Sound Sex and the Aging Heart*. New York: Human Sciences Press, 1974.
19. Zillbergeld B. *Male Sexuality: A Guide to Sexual Fulfillment*. Boston: Little, Brown Company, 1978.

References

1. Talmadge WC, Talmadge LD. A transactional perspective on the treatment of sexual dysfunctions. In: L'Abate L. (ed), *The Handbook of Family Psychotherapy and Therapy (Volume II)*. Homewood, Illinois, 1985, pp. 1107-1127.
2. Kaplan HS. *The Evaluation of Sexual Disorders: Psychological and Medical Aspects*. New York, Brunner/Mazel, 1983.
3. Talmadge LD, Talmadge WC. Relational sexuality: An understanding of low sexual desire. *J Sex Marital Therapy* 1986;12 (1):1-21.
4. Miller GD, McLaughlin CS, Murphy NC. Personality correlates of college students reporting sexual dysfunction. *Psych Reports* 1982;51:1075-1082.
5. Derogatis LR, Melisaratos N. The DSFI: A multidimensional measure of sexual functioning. *J Sex Marital Therapy* 1979;5:244-281.
6. Talmadge LD, Talmadge WC. Sexuality assessment measures for clinical use: A review. *Am J Family Therapy* 1990;18(1):80-105.
7. Talmadge LD, Wallace SC. Reclaiming sexuality in female incest survivors. *J Sex Marital Therapy* 1991;17(3):163-182.
8. LoPiccolo J, Steger JC. The sexual interaction inventory: A new instrument for assessment of sexual dysfunction. *Arch Sexual Behavior* 1974;3:585-595.

Sexual Misconduct by Physicians

Gene G. Abel, MD, Drue H. Barrett, PhD, Peter S. Gardos, BA

Introduction

THERE IS long-standing consensus in the medical community that sexual relations with patients are unethical. Yet, this is still an issue of major concern, with numerous physicians being charged each year with sexual misconduct. This paper presents an overview of the literature and introduces a treatment model for professionals with sexual misconduct.

The fields of psychiatry and psychology have taken the lead in trying to understand sexual involvement with patients, hence much of the literature concentrates on psychotherapists. The opportunity and prevalence of sexual misconduct may be greater in these professions, though most of the information presented will be applicable to any medical professional.

Prevalence

Over half of all psychiatrists will have a patient at some point who was sexually involved with a previous therapist.¹ A number of large surveys have been undertaken in an attempt to assess the extent of

This paper presents an overview of the literature and introduces a treatment model for professionals with sexual misconduct.

sexual involvement between physician and patient.^{2,5} While acknowledging the limitations of survey research, it is striking that in all of these studies, a large number of professionals admitted to sexual contact with their patients (as high as 13.7%). Given that these surveys depended upon doctors admitting to having engaged in unethical behaviors, these results are a conservative estimate. In addition, in the one study of its kind, Bajt and Pope⁶

found that 24% of psychologists surveyed reported they were aware of instances of sexual contact between therapists and patients who were minors. While this study does not provide information regarding the percentage of therapists engaging in child molestation of their patients, it alerts us to the fact that when discussing sexual exploitation of patients by professionals, children must be included in the analysis.

In a recent review of the literature, Pope⁷ attempted to identify predictors of therapist-patient sexual involvement. By far the most robust finding was that in all published studies, male professionals are far more likely than female professionals to have engaged in sexual relations with their patients. No differences were found between specific fields, such as psychiatry or obstetrics, nor were any trends noted related to the educational or professional level of the practitioner. No studies have reported a significant relationship between a therapist's likelihood of engaging in sexual intimacies with a patient and their theoretical orientation.

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Surprisingly, Gartrell, et al⁸ found that those psychiatrists who had been through personal therapy were more likely to become sexually involved with a patient. Additionally, therapists who engage in sexual activities with their patients tend to be significantly older than their patients. Perhaps the single best predictor of a therapist sexually exploiting a patient, is that they had already done so with a previous patient.⁹

One way of conceptualizing etiologic factors in sexual misconduct involves an analysis of common scenarios that lead to sexual involvement with patients.

A number of recent surveys appear to show an overall decline in the rate of sexual involvement with patients. However, as pointed out by Gabbard and Menninger,¹⁰ "rather than assuming that these data reflect a sudden decline in unethical behavior, it is more convincing to view the trend as reflective of less candid reporting because a number of states are now making therapist-patient sexual relations a felony."

Ethical Guidelines

The ethical guidelines of the American Medical Association and the American Psychiatric Association explicitly state that "sexual activity with a patient is unethical."¹¹ Similar statements occur in the guidelines of the American Psychological Association¹² and other professional groups. Where the ambiguity occurs regarding professional/patient sexual intimacies is

in relation to former patients. There is marked division in professionals' beliefs regarding this behavior. Appelbaum and Jorgenson¹³ found considerable variability in ethical, legal, and administrative approaches to involvement with former patients, which they believe stems from confusion regarding the rationale behind such restrictions. The Revisions Task Force of the Ethics Committee of the American Psychological Association has proposed that an absolute prohibition against sex with patients following termination of therapy be made an explicit part of the new ethical guidelines.¹⁴ It is beyond the scope of this paper to describe the numerous arguments for and against post-termination sexual contact with patients; the reader is referred to the above cited sources as well as articles by Gabbard and Pope¹⁵ and Shopland and VandeCreek.¹⁶

One ethical dilemma faced by many clinicians is that of reporting an errant colleague. Medical professionals have an ethical obligation to expose those colleagues who are in violation of ethical guidelines. Yet, the reporting of sexual exploitation by a fellow professional often conflicts with the obligation to maintain confidentiality. It has been shown that when a psychiatrist is publicly exposed, several colleagues often acknowledge having known about the behavior. Because most of this knowledge comes about in the course of events that fall under the protection of confidentiality, the reporting of such professionals often presents numerous ethical concerns. Frequently, it is easier to do nothing, which seems to have become the excepted norm of the profession.¹⁷ While maintaining a patient's confidentiality is of great importance, this should not blind us to other ethical mandates. There are effective ways to mediate both of these very valid concerns. The reader is referred to Stone¹⁷ for a review of this issue.

Etiology

Various authors have attempted to explicate the inner dynamics involved in professionals who sexually abuse patients. Some have suggested looking at issues such as confusion of therapist's needs with patient's needs, latent hostility, and overzealousness on the part of the therapist.¹⁸ Others have proposed the concept of "lovesickness".¹⁹ Finally, some have offered a breakdown of the therapist's personality into categories such as naive, mildly neurotic, socially isolated, impulsive, and psychotic.²⁰ However, none of these approaches offers any substantive analysis of data and at this point are speculations based upon clinical contact with selected offenders.

One way of conceptualizing etiologic factors in sexual misconduct is presented by Pope and Bouhoutsos²¹ and involves an analysis of common scenarios that lead to sexual involvement with patients.

Those therapists who engage in frequent nonsexual touching of their patients are far more likely to subsequently engage in sexual touching with a patient. A good rule of thumb...is whether this touching is selective, based on the gender and attractiveness of the patient.

These nine situations are: 1) Role trading — where the therapist takes on increasingly more characteristics of "patient," with the therapist's wants and needs becoming the fo-

cus of treatment; 2) Sex Therapy — here the therapist presents to the patient the idea that sexual relations with the therapist is a valid treatment for sexual or other relationship problems; 3) As if... — the therapist treats positive transference as if it were the result of something other than transference; 4) Svengali — the therapist creates and exploits the patient's excessive dependence; 5) Drugs — the use of alcohol or drugs as part of the seduction or as a trade for sex; 6) True love — the physician uses rationalizations to discount the professional nature of the relationship and the ensuing dynamics and responsibilities; 7) It just got out of hand — this is a failure on the part of the therapist to treat the emotional closeness and attraction that develops with enough attention or care; 8) Time out — the main element at work here is the therapist's failure to acknowledge that the therapeutic relationship does not end merely because contact occurs outside of the normally scheduled time and location; and 9) Hold me — the therapist takes advantage of the patient's desire for nonsexual contact.

These scenarios represent the tactics used by many professionals that enable them to engage in and maintain their unethical behavior. That physicians use these cognitive distortions is further supported by the survey results of Herman, et al²² which showed that offenders believed in certain rationalizations significantly more frequently than nonoffenders.

What is most clear is that nonsexual contact frequently proceeds sexual contact.²³ Those therapists who engage in frequent nonsexual touching of their patients are far more likely to subsequently engage in sexual touching with a patient. A good rule of thumb to gauge whether this is indeed a legitimate style of therapy, and not a useful warning sign, is whether this touching is selective, based on the gen-

der and attractiveness of the patient.

Victim Characteristics

It has also been noted that certain types of patients, as well as particular patient-therapist dynamics, are more likely to elicit inappropriate sexual behavior by physicians and therapists. It has been suggested that borderline, and in particular suicidal borderline patients, can be especially effective in manipulating therapists into having sexual relations.²⁴ These patients have been described as "possessing self-deprecating and hateful internal object relations, primitive defenses such as splitting and protective identification, and ego defi-

One a physician has engaged in sexual misconduct within his practice, it is possible for him to continue in the medical field if he receives appropriate treatment.

cits that cause difficulty in integrating and modulating affect and that can lead to transient psychotic lapses."²⁴ One needs to be especially aware of counter-transference issues when dealing with borderline patients and to resist the patient's perception of needing the therapist to achieve wholeness. Aside from borderline personality, many victims appear excessively vulnerable, with a great majority being survivors of previous abuse. All of this evidence, however, is highly anecdotal and speculative, and the literature on this topic has yet to come up with substantive data regarding a victim profile.

A more fruitful avenue is to examine commonalities and the spe-

cific dynamics at play between therapist and patient when sexual boundary violations occur. Several different dynamics have been suggested, the most important being: 1) Power issues — because of the nature of the physician-patient relationship, there is always an imbalance of power, and this may not be fully appreciated by the physician or may even be deliberately exploited;²⁵ 2) Needs of the therapist overcoming needs of the patient — many times patients endeavor to please their therapists, even at their own expense, and in cases of high need on the part of the therapist, this may translate into sexual misconduct; 3) Transference/counter-transference issues — the reaction of the patient to the physician, as well as the physician to the patient, can be quite powerful; such strong feelings are sometimes misinterpreted as true emotions as opposed to being a result of the therapeutic situation;²⁶ 4) Repetition compulsion — patients often re-enact unresolved issues in therapy in an attempt to master them; this is especially the case with incest survivors who may re-create the blurred boundaries of their families; once again the physician needs to be careful not to misinterpret the patient's feelings as if they were unrelated to therapy;²⁶ and 5) Testing of the therapist by the patient — as much as the provocative patient may wish to seduce the therapist, often this is in an unconscious attempt to see if the therapist will resist and thus reassure her that her needs and rights will be put first.²⁷

Impact on Victim

The impact on the victim of inappropriate sexual behavior by a physician can be quite severe. Feldman-Summers and Jones²⁸ compared women who had sexual contact with their psychotherapists, women who had sexual contact with some other health care professional, and women who had no sexual contact

with either a psychotherapist or any other health care worker. Those women who experienced sexual contact with their psychotherapist reported greater mistrust and anger towards men and therapists, as well as a greater number of psychologic and psychosomatic symptoms following the cessation of therapy. Women who had sexual contact with other kinds of health care professionals reported similar reactions.

Feldman-Summers and Jones²⁸ also noted that the severity of impact of sexual misconduct was significantly related to the magnitude of psychologic and psychosomatic symptoms prior to treatment. This is not surprising, since those patients who had significant problems prior to sexual contact with their psychotherapist or physician, will then have the additional stressors associated with sexual victimization, and possibly less coping skills to deal with them. In addition, it is likely that due to the inappropriate sexual relationship, the patients did not receive the proper care or attention to their problems. Interestingly, the

The treatment provided in the sexual misconduct program focuses on developing skills to decrease inappropriate arousal and to allow the physician to return to practice without presenting a risk to patients.

marital status of the therapist or other health care practitioner also had a significant effect on the impact on the victim. This is likely due to the fact that sexual contact with

a married physician brings with it additional feelings of both guilt and anxiety which can be expected to exacerbate previous symptomatology.

Pope²⁹ has also written extensively about a condition that he refers to as the "Therapist-Patient Sex Syndrome." He states that this disorder is similar to other syndromes such as Battered Spouse or Rape Response Syndrome, and is suffered by many patients who had sexual relations with their therapist. Ten characteristics are said to be associated with the Therapist-Patient Sex Syndrome: 1) Ambivalence — similar to the reaction of women in other types of abusive relationships, the victim may long to escape the exploitive physician yet fear the separation; 2) Feelings of guilt — despite being entirely unfounded, most victims feel as if they are in some way to blame for the sexual abuse; 3) Sense of emptiness and isolation — again similar to survivors of rape or battering, many victims feel emotionally hollow and alone; 4) Sexual confusion — due to being sexually traumatized, most victims develop a profound confusion about sexuality that can effect their sense of identity; 5) Impaired ability to trust — having opened themselves up so completely to their therapists only to be followed by betrayal, leaves many women with a lifelong mistrust of professionals and often of other people in general; 6) Identity, boundary, and role confusion — often analogous to incest, roles and boundaries becomes blurred when a physician becomes sexually involved with a patient; this has lasting consequences on the victim's ability to form appropriate boundaries with others and maintain a sense of identity and proper roles in their lives; 7) Emotional lability — often the experience of having had sex with their physician can be emotionally overwhelming to the patient; 8) Suppressed rage — victims frequently feel an understand-

able rage towards the exploitive therapist, yet this is often blocked by their feelings of guilt and ambivalence as well as the force and influence of the therapist himself; 9) Increased suicidal risk — the rage that victims feel may turn to self-destructiveness; feelings of guilt or

It is important that the feedback process assist the physician in describing in as much detail as possible the antecedents which allowed him to carry out his sexual misconduct.

hopelessness may reach such high levels that suicide may seem to be the only way out; and 10) Cognitive dysfunction — the trauma caused by inappropriate sexual involvement with a therapist is often so great that cognitive abilities, particularly attention and concentration, are impaired.

Finally, the problems with subsequent psychotherapy have been discussed from the perspective of both the patient and the therapist.³⁰ Patient issues tend to center around issues of trust, anxiety, and guilt. For the therapist, problems revolve around how to best understand and evaluate the patient's past sexual experiences and how to avoid repeating in some way the previous therapist's counter-transference issues.

Treatment Approaches

Pope³¹ has stated that "in a search of the literature, I failed to locate any publication presenting principles of therapy to help enable therapists at risk to refrain from engaging in sexual relations with their patients." The situation has not

changed much since that time. With the exception of a handful of articles,^{20,32} strikingly little has been written regarding treatment possibilities. No treatment outcome studies in this area have been reported. At the Behavioral Medicine Institute of Atlanta, we have begun a treatment program which has had success in reintegrating professionals who have engaged in sexual misconduct back into practice. This program is unique in that it integrates multiple treatment components, most importantly a system of surveillance to ensure compliance with treatment objectives (see Table 1). What follows is a description of this program.

A Sexual Misconduct Treatment Program

Once a physician has engaged in sexual misconduct within his practice, is it possible for him to continue in the medical field? Our treatment with such professionals indicates that it is. This treatment has involved an integrated approach with both individual and group therapy elements. The major components of treatment include training in cognitive-behavioral procedures found to be effective in decreasing inappropriate sexual arousal, detailed examination of episodes of sexual misconduct in order to identify antecedents to inappropriate behavior, and increasing the physician's understanding of the impact of his sexual misconduct upon the victim through literature review and attendance at continuing medical education courses. Additionally, the physician is assisted in developing a detailed practice plan specifying how future patients will be protected against sexual abuse. Included in the practice plan are specifics regarding the establishment of a surveillance network which submits data on the appropriateness of the physician's behavior, a system for surveying patient's feedback regarding the physician's professional conduct,

TABLE 1 — Components of Sexual Misconduct Treatment Program

1. Cognitive-behavioral treatment
 - a. identify antecedents to sexual misconduct
 - b. develop alternatives to antecedents
 - c. identify grooming behaviors
 - d. confront cognitions used to rationalize misconduct
 - e. build victim empathy
 - f. develop a relapse prevention strategy
2. Review the impact of sexual misconduct on patients
 - a. CME course regarding sexual misconduct
 - b. literature review and patient's article on sexual misconduct
3. Individual psychotherapy to identify/treat intrapsychic causes of sexual misconduct
4. Installation of a practice plan
 - a. possible restriction of patients
 - b. modification of office characteristics or practice setting
 - c. surveillance network with feedback from
 - 1) informed staff and colleagues
 - 2) patients
 - 3) professional practice group
5. A summary of all treatment program components advanced to the licensing board or other sponsoring organization for its review, modification, acceptance or rejection.

and handouts for patients detailing the physician's ethical guidelines for the practice of medicine.

The major objective of therapy is to determine to what extent and under what limitations the physician who has engaged in sexual misconduct may return to practice. Initially, therapy is conducted on an individual basis to assess the specifics of the physician's sexual misconduct, and to begin training in cognitive-behavioral procedures aimed at decreasing inappropriate arousal. Additionally, family sessions are used to assess the degree of social support for the physician, to break through the denial and secrecy that typically surrounds sexual misconduct, and to enlist family members in reporting on the physician's progress. As treatment progresses, the physician enters group treatment with other physicians who have been similarly charged with sexual misconduct within their practice. Group therapy focusing on relapse prevention is a long-term component of treatment and provides continuity of care and ongoing surveillance to monitor the physician's conduct after returning to practice. Overall, the treatment

provided in the sexual misconduct program focuses on developing skills to decrease inappropriate arousal and to allow the physician to return to practice without presenting a risk to patients. Physicians are also referred for individual psychotherapy in order to address the underlying dynamics of their behavior.

1. Cognitive-Behavioral Treatment

Physicians receive cognitive-behavioral treatment using a relapse prevention model to identify antecedents to inappropriate sexual misconduct and to develop alternative responses to these antecedents. Past research has documented the success of cognitive-behavioral techniques in decreasing inappropriate sexual arousal.^{33,34} This form of treatment has been used extensively with a variety of forms of sexual behavior (exhibitionism, pedophilia) and includes such procedures as ammonia aversion, covert sensitization, and cognitive restructuring. As utilized within the sexual misconduct treatment program, the main goal of these procedures is to teach the physician how to disrupt inappropriate thoughts,

fantasies, or beliefs that have been associated with sexual misconduct with patients. The details of how to conduct these procedures is beyond the scope of this article, however, they are well documented elsewhere.³⁵

A second approach for identifying antecedents to sexual misconduct is for the physician to write a detailed description of one episode of sexual misconduct. This description is written in the form of a letter to the victim and should explain how the victim was "groomed" by the physician for the purpose of sexual misconduct. This letter is not intended to be mailed to the victim and is not included in the physician's medical record. Physicians find this aspect of therapy to be especially difficult, as it directly confronts their images of themselves as concerned care givers. For most individuals engaged in inappropriate sexual behavior, denial is a central component. The purpose of writing the letter as if it were to be sent to the victim is to break through this denial and assist the physician in becoming aware of how he actively created an environment in which sexual misconduct could occur. It is especially important to help the physician understand how his behaviors, cognition, and affect served as manipulations of the patient. The letter is read out loud in the physician group so that others may provide feedback and hear the physician's previous rationalizations. Often, the first attempt at this letter results in apologies to the victim and generalized statements of wrong doing. It is important that the feedback process assist the physician in describing in as much detail as possible the antecedents which allowed him to carry out his sexual misconduct. This element of treatment is based upon the work of Hindman.³⁶

II. Development of the Practice Plan

The majority of physician's in-

involved in the sexual misconduct program entered treatment after allegations of sexual misconduct were brought before the medical board and they were forced to terminate practice. They are typically in a position where they have lost their source of income and the sup-

It is important to remember that the vast majority of professionals report feeling sexually attracted at least occasionally to a patient. This in and of itself is normal.

port of their medical colleagues. Developing a strategy which would allow return to practice is a major component of treatment and is initiated early so that the elements of the practice plan can be added on as they become more apparent. The purpose of the practice plan is for the physician to demonstrate to potential employers, the medical board, and other concerned individuals that he has taken precautions and is able to practice in a safe manner without further incidences of sexual misconduct with patients. Mandatory components of the practice plan include details of how patients will be protected from sexual misconduct, establishment of a surveillance team of coworkers, and development of a patient survey form.

The majority of physicians who have participated in the sexual misconduct program are males who have become sexually involved with adult female patients. A continuum of strategies is available for protecting these patients. One approach is to prohibit the physician

from treating female patients. This may be stipulated as a time-limited restriction (such as for the first year of return to practice) or as a permanent restriction. The physician is responsible for finding a work setting where access to female patients is highly unlikely, such as the criminal justice system. Another approach is to require that female patients only be seen in the presence of a chaperon who is fully informed about the nature of the physician's prior sexual misconduct. A third approach is to allow the physician to see female patients while structuring the physical environment so that patients are protected. This has included the stipulation that the physician only see patients in an office with a window. The office furniture is arranged so that the physician is always visible to office staff. The office manager is asked to do random observations of the physician, such as noting the amount of time spent with female patients.

An additional method for assuring that the physician is not engaging in sexual misconduct is to inform professionals and paraprofessionals at the physician's work site about the details of the sexual misconduct. Individuals to be informed should be those who are best able to observe the patient-physician interaction. At least three of these individuals are asked to act as a supervisory team observing, during the normal course of their day, the physician's interactions with patients and coworkers. It is important that the surveillance team be instructed that they are not to act as detectives, but rather to be informed observers of the physician during their routine interactions with him. One of the members of the surveillance team should be an individual on the physician's call group as this person will have direct contact with the physician's patients.

The surveillance team is asked

Figure 1 — Physician Surveillance Form

Rater's Name: _____ Date _____

Rater's Signature: _____

Dr. _____ has admitted to past inappropriate sexual behavior with adult female patients. In the past, this behavior has included sexual misconduct during physical examinations and office sessions. Dr. _____ reports that in the past this inappropriate behavior might have been recognized because he did not bill such patients; he locked his office door when he was with these patients; he socialized outside the office with these patients, and he saw these patients before 8:00 am, during evening hours, or on weekends.

This form is to be completed by staff who work with Dr. _____ and/or his patients. Your responses will *not be kept confidential* but will be made available to the licensure board, and Dr. _____'s therapist.

Please evaluate each area of performance by circling the appropriate number.

	Never	Seldom	Usually	Most of the Time	Always
1 Appropriately uses chaperons with female patients.....	1	2	3	4	5
2 Keeps office door open while with patients.....	1	2	3	4	5
3 Deals with patients in an ethical manner	1	2	3	4	5
4 Has clear social and physical boundaries established with patients	1	2	3	4	5
5 Sees patients only during normal business hours.....	1	2	3	4	5
6 Avoids revealing details about his personal life to patients	1	2	3	4	5
7 Interacts professionally with female nurses and other office staff	1	2	3	4	5
8 Is receptive to feedback from staff about his behavior with patients	1	2	3	4	5

Please add any specific documents on the back of this page. Dr. _____'s signature below indicates his awareness and approval of your surveillance of him and that he agrees to your advancing these reports irrespective of their consequences to him.

Physician's Signature

to complete monthly reports of the physician's behavior and to forward this information to the treatment team. The surveillance forms include a description of the physician's typical behaviors which al-

lowed him to engage in sexual misconduct. This is included in order to alert the observers to what behaviors may be indicators of misconduct. This may include spending increased time in sessions,

scheduling unusually early or late physical exams, non-billing of patients for unknown reasons, or excessive socializing with patients outside of the professional setting.

These surveillance data are re-

Figure 2 — Patient Survey

It is our desire to offer good quality care in a comfortable atmosphere. We value your opinion about how we are doing and would like to have you rate us in a number of areas. Please circle the number which best describes your opinion about your doctor's care and your treatment at our office. Include any comments which you feel would help us improve your treatment.

Your Doctor's Name: _____

Your Sex: _____ Male _____ Female

Today's Date: _____

Please rate your doctor's performance in the following areas:

	Poor	Good	Fair	Excellent
1. Understanding the nature of my problems.....	1	2	3	4
2. Making me feel at ease.....	1	2	3	4
3. Ability to listen and really hear what I am saying	1	2	3	4
4. Conducting examinations in a professional manner.....	1	2	3	4
5. Explaining the proposed treatment	1	2	3	4

Please rate the office staff in the following areas:

	Poor	Good	Fair	Excellent
6. General helpfulness of the office staff.....	1	2	3	4
7. Explaining the "Patient's Bill of Rights" to my satisfaction	1	2	3	4
8. Protecting my confidentiality.....	1	2	3	4
9. Explaining the billing procedures.....	1	2	3	4

Please add any comments that you think would help us improve your care or make you feel more comfortable.

viewed in a timely fashion and feedback given to the physician regarding the surveillance team's observations. Any report of suspicious or inappropriate behavior is investigated by the treatment team. Additionally, summaries of the surveillance data are forwarded to the state medical board. It is made clear on the surveillance forms that the information provided will not be kept confidential and that the physician is aware and approves of the surveillance system and consents to this information being for-

warded to the treatment team and the state medical board. Figure 1 presents an example of the typical surveillance form used with physicians.

Another method of monitoring the physician once he returns to practice is to request that patients provide feedback regarding the physician's professional conduct. This is typically accomplished within the format of collecting information on the patient's satisfaction with the physician's practice. Patients are asked to rate a number

of dimensions of the physician's practice, including degree of comfort with the physician, appropriateness of the physician's behavior, satisfaction with the handling of billing issues, and courteousness of office staff. These data are collected every 3 months on all patients seen within a 1-week interval. The forms are administered by office staff with the exact week of administration determined by the staff rather than the physician. As with the surveillance data, the treatment team reviews the patient surveys on

a regular basis to assess if any complaints of the physician's behavior have been made and the physician is provided with feedback regarding the patient ratings. Figure 2 presents an example of the typical patient survey.

A final component of the practice plan is to ensure that all patients are educated about what constitutes ethical medical care. If patients are knowledgeable of their rights and how to go about reporting unethical behavior, they will be better protected within the physician-patient relationship. Specifically, patients need to be informed that the medical standards of the American Medical Association specify that sexual contact between a physician and a patient is unethical. To accomplish this, a one page handout summarizing medical ethical standards and patient rights is administered and explained by office staff. Patients may also be asked to sign a form indicating that they have received this information and that its contents have been explained to their satisfaction.

III. Appreciating the Impact of Sexual Misconduct

A variety of tactics are used to assist the physician in appreciating the impact of his behavior upon the patient. Initially, all physicians entering the sexual misconduct treatment program are required to research the psychiatric and psychologic literature in order to gain a better understanding of the harmful effects of sexual misconduct on the patient and of the physician-patient dynamics which make sexual misconduct more likely. The physician is asked to submit to the treatment team a written summary of this literature.

Additionally, physicians are asked to attend continuing medical education courses specifically dealing with ethical and victim issues. Documentation that the physician has attended this course work

is submitted to the treatment team.

Conclusions

There are a number of things that physicians and therapists can do to prevent sexual exploitation of patients. Obviously, one needs to start with oneself. It is important to remember that the vast majority of professionals report feeling sexually attracted at least occasionally to a patient.²² This in and of itself is normal. What is crucial is to prevent these feelings from escalating into inappropriate behavior. There are a number of suggestions that can help.

First, as sexual contact and sexual relationships are often preceded by nonsexual contact and nonsexual dual relationships, it is best to avoid these. Second, monitor your own thoughts, feelings, and impulses toward patients. If in doubt, get supervision. It is common that professionals who end up in sexual relations with patients hide their encroaching feelings from potential supervisors. Third, establish and publish clear standards for social and physical contact at your work site(s). Review these standards with colleagues and office staff, and request feedback to assess compliance with the standards. Fourth, be appreciative of the published literature that reflects the high incidence of professional sexual misconduct with patients. Finally, studies by Borys and Pope,⁵ Vasquez,¹⁴ and Menninger³⁷ describe preventive steps such as consumer education, advocacy and self-help groups, resources for impaired professionals, administrative policies, and risk management approaches which might be employed to help prevent professional sexual misconduct.

References

1. Gartrell N, Herman J, Olarte S, et al. Reporting practices of psychiatrists who knew of sexual misconduct by colleagues. *Am J Orthopsych* 1987;57(7):287-295.
2. Stake JE, Oliver J. Sexual contact between therapist and client: A survey of psychologists' attitudes and behavior. *Prof Psychol Res Pract*

1991;22(4):297-307.

3. Pope KS. Research and laws regarding therapist-patient sexual involvement: Implications for therapists. *Am J Psychother* 1986;40(4):564-571.

4. Pope GG. Abuse of psychotherapy: Psychotherapist-patient intimacy. *Psychother Psychosom* 1990;53:191-198.

5. Borys DS, Pope KS. Dual relationships between therapists and client: A national study of psychologists, psychiatrists, and social workers. *Prof Psychol Res Pract* 1989;20(5):283-293.

6. Bajt TR, Pope KS. Therapist-patient sexual intimacy involving children and adolescents. *Am Psychol* 1989;44(2):455.

7. Pope KS. Therapist-patient sexual involvement: A review of the research. *Clin Psychol Rev* 1990;10:477-490.

8. Gutheil TG. Patients involved in sexual misconduct with therapists: Is a victim profile possible? *Psychiatric Ann* 1991; 21(11):661-667.

9. Brodsky AM. Sex between patient and therapist: Psychology's data and response. In: Gabbard GO, ed. *Sexual Exploitation in Professional Relationships*. Washington, D.C.: American Psychiatric Press; 1989.

10. Gabbard GO, Menninger WW. An overview of sexual boundary violations in psychiatry. *Psychiatric Ann* 1991;21(11):649-650.

11. American Psychiatric Association. Opinions of the ethics committee on the principles of medical ethics with annotations especially applicable to psychiatry. Washington, D.C.: APA, 1985.

12. American Psychological Association. *Ethical Principles of Psychologists*. Washington, DC: APA, 1981.

13. Appelbaum PS, Jorgenson L. Psychotherapist-patient sexual contact after termination of treatment: An analysis and a proposal. *Am J Psychiat* 1991;148(11):1466-1472.

14. Vasquez MJT. Sexual intimacies with clients after termination: Should a prohibition be explicit? *Ethics Beh* 1991;1(1):45-61.

15. Gabbard GO, Pope KS. Sexual intimacies after termination: clinical, ethical and legal aspects. In: Gabbard GO, ed. *Sexual Exploitation in Professional Relationships*. Washington, D.C.: American Psychiatric Press; 1989.

16. Shopland SN, VandeCreek L. Sex with ex-clients: Theoretical rationales for prohibition. *Ethics Beh* 1991;1(1):35-44.

17. Stone AA. Sexual misconduct by psychiatrists: The ethical and clinical dilemma of confidentiality. *Am J Psychiat* 1983;140:195-197.

18. Gabbard GO. Psychodynamics of sexual boundary violations. *Psychiatric Ann* 1991;21(11):651-655.

19. Twemlow SW, Gabbard GO. The lovesick therapist. In: Gabbard GO, ed. *Sexual Exploitation in Professional Relationships*. Washington, D.C.: American Psychiatric Press; 1989.

20. Schoener GR, Gonsiorek J. Assessment and development of rehabilitation plans for counselors who have sexually exploited their clients. *J Counsel Dev* 1988; 67:227-232.

21. Pope KS, Bouhoutsos JC. *Sexual intimacy between therapists and patients*. New York: Praeger;1986.

22. Herman JL, Gartrell N, Olarte S, et al. Psychiatrist-patient sexual contact: Results of a national survey, II: Psychiatrists' attitudes. *Am J Psychiatry* 1987;144(2):164-169.

23. Kardener SH, Fuller M, Mensh IN. Characteristics of "erotic" practitioners. *Am J Psychiatry* 1976;133(11):1324-1325.

24. Eyman JR, Gabbard GO. Will therapist-patient sex prevent suicide? *Psychiatric Ann* 1991;21(11):669-674.

25. Chesler P. Women and madness. New York: Doubleday; 1972.

26. Holtzman BL. Who's the therapist here? Dynamics underlying therapist-client sexual relations. *Smith College Studies in Social Work* 1984;54(3):204-224.

27. Stone M. Boundary violations between therapist and patient. *Psychiatric Ann* 1976;6(12):670-677.

28. Feldman-Summers S, Jones G. Psychological impacts of sexual contact between therapists or other health care practitioners and their clients. *J Consul Clin Psychol* 1984;52(6):1054-1061.

29. Pope KS. How clients are harmed by sexual contact with mental health professionals: The syndrome and its prevalence. *J Counsel Dev* 1988;67:222-226.

30. Apfel RJ, Simon B. Patient-therapist sexual

contact: II. Problems of subsequent psychotherapy. *Psychother Psychosom* 1985; 43:63-68.

31. Pope KS. Preventing therapist-patient sexual intimacy: Therapy for a therapist at risk. *Prof Psychology: Res Prac* 1987; 18(6):624-628.

32. Pope KS. Rehabilitation of therapists who have been sexually intimate with a patient. In: Gabbard GO, ed. *Sexual Exploitation in Professional Relationships*. Washington, D.C.: American Psychiatric Press; 1989.

33. Marshall WL, Barbaree HE. Outcome of comprehensive cognitive-behavioral treatment programs. In: Marshall WL, Laws DR, Barbaree HE, eds. *Handbook of Sexual Assault: Issues, Theories and Treatment of the Offender*. New York, Plenum Press; 1990.

34. Marshall WL. Effectiveness of treatment with sex offenders. Presented at the Second Interna-

tional Conference on the Treatment of Sex Offenders; September, 1991; Minneapolis, MN.

35. Abel GG, Becker JV, Cunningham-Rathner J, Mittelman MS, Rouleau JL, Kaplan M, Reich J. *Treatment of Child Molesters*. Atlanta, Georgia, Behavioral Medicine Institute of Atlanta, 1984.

36. Hindman J. *Just Before Dawn: From the Shadows of Tradition to New Reflections in Trauma Assessment and Treatment of Sexual Victimization*. Ontario: AlexAndria Associates; 1989.

37. Menninger WW. Identifying, evaluating, and responding to boundary violation: A risk management program. *Psychiatric Ann* 1991;21(11):675-680.



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Sexual Harassment: It's Not Just Applicable to Judges and Law Professors

Andrea H. Fox

IN THE FALL of 1991, the issue of sexual harassment in the workplace became widely publicized during the highly charged Senate confirmation hearings for Judge Clarence Thomas' nomination to the Supreme Court. Sexual harassment, still a popular subject in offices, plants, hospitals, etc. around the country, is very much a concern of employers. Anita Hill's public allegations of sexual harassment by Judge (now Justice) Thomas made millions of American women sit up and take note. It appears that sexual harassment is a fact of life in the workplace today. Employers should be concerned that, in light of Ms. Hill's coming forward with her personal story, more men and women will follow by filing harassment claims with the EEOC or the courts. Such sex harassment suits could severely damage a company's reputation as well as its bank account.

While sexual harassment has been a basis for lawsuits since the early 1980s, it is only recently that Americans are beginning to understand and acknowledge the existence of sexual harassment and take affirmative actions to prevent it. This article provides an overview of the law in the area of sexual harassment and offers concrete suggestions on actions a physician can take to avoid liability for sexual harassment.

Sexual harassment is a violation of Title VII of the Civil Rights Act of

6 This article provides an overview of the law in the area of sexual harassment and offers concrete suggestions on actions a physician can take to avoid liability for sexual harassment. 9

1964, which makes it "an unlawful employment practice for an employer ... to discriminate against any individual with respect to his compensation, terms, conditions or privileges of employment because of race, color, religion, sex or national origin."¹ Sexual harassment is a form of sex discrimination under Title VII, not because of the sexual nature of the conduct, but because the harasser treats members of one sex differently.² The Equal Employment Opportunity Commission defines sexual harassment to include unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature.³

This article was prepared at the request of the *Journal*. Ms. Fox is an associate in the law firm of Vincent, Chorey, Taylor & Feil, Suite 1700, The Lenox Building, 3399 Peachtree Road, NE, Atlanta, GA 30326. Send reprint requests to Ms. Fox.

Types of Sexual Harassment

1. Tangible Job Benefit Harassment

The EEOC and the courts typically have placed sexual harassment claims under Title VII in two categories. The first category, known as the "Tangible Job Benefit Harassment" or "Quid Pro Quo Harassment," occurs when getting or keeping a job or job benefit, such as a promotion or raise, is conditioned upon acceptance or rejection of sexual advances, requests for sexual favors or other physical or verbal conduct sexual in nature.⁴ Tangible Job Benefit Harassment is of most concern to physicians in managerial or supervisory positions, since co-workers are not usually in a position to offer or withhold jobs or job benefits to fellow co-workers. The most obvious example of this type of sex harassment would be a doctor threatening to fire a nurse if she did not have sexual relations with him. Another example of this type of harassment would be a senior physician refusing to hire another physician unless that physician submitted to his sexual advances. By conditioning future advancement or continued success on the acceptance of sexual advances or by assigning particularly onerous tasks for the refusal of sexual advances, a physician can be liable for Tangible Job Benefit Harassment.

In addition, an employee may

have suffered Tangible Job Benefit Harassment even though that employee was not directly subjected to sexually harassing behavior. The employee must show that a tangible job benefit was awarded to an employee who submitted to the sexual advances of the supervisor offering the benefit.⁵ In order to es-

“By conditioning future advancement or continued success on the acceptance of sexual advances or by assigning particularly onerous tasks for the refusal of sexual advances, a physician can be liable for Tangible Job Benefit Harassment.”

tablish this “favoritism” as a form of sexual harassment, the employee must show that she was qualified for the job benefit and that submission to the sexual advances was made a condition for job benefits on a widespread basis.⁶

2. Hostile Environment Harassment

The second type of sexual harassment is commonly referred to as “Hostile Environment Harassment” and includes any action of a sexual nature that is unwelcome or unwanted and has the effect of making a reasonable person feel “uncomfortable” on the job. This type of sexual harassment occurs when the conduct is so severe or pervasive that it has the effect of interfering with an individual’s work performance or creates an intimidating, hostile, or offensive working environment.⁷ The same type of harassing behavior that sup-

ports a claim for Tangible Job Benefit Harassment can also sustain a claim for Hostile Environment Harassment. In the latter case, the sexual advances and requests for sexual favors are not made conditions for job benefits by supervisors; instead, the harassing behavior of co-workers has the effect of creating a work environment of intimidation, ridicule, and insult.

Some examples of Hostile Environment Harassment include permitting pornographic pictures to be posted in common areas or holding a company-sponsored “wet t-shirt” contest. In addition, derogatory, obscene, or insulting comments about women, personally addressed to them, have been found to be sufficiently offensive and severe as to constitute Hostile Environment Harassment.⁸ Posting lewd photographs and cartoons containing comments about fellow employees and playing sexually offensive pranks are other examples of Hostile Environment Harassment.⁹

With its broad definition, Hostile Environment Harassment presents many difficulties for employers. For example, when does good-natured teasing go too far? When does off-color conversation, which is accepted by most employees, become sex harassment? Many courts have adopted a gender-conscious “reasonable woman” or “reasonable man” standard when determining the severity of alleged sexual harassment.¹⁰ This standard recognizes the fact that men and women may have different perspectives on behavior. In analyzing Hostile Environment Harassment, the question becomes whether the conduct would interfere with a reasonable woman’s work performance and seriously affect her psychologic well-being.

In addition to analyzing what the reasonable man or woman would do under the circumstances, the complaining employee’s actions

must also be considered to determine if Hostile Environment Harassment occurred. In order to determine if the sexual advances, requests for sexual favors, or verbal or physical conduct of a sexual nature are “severe” enough to constitute Hostile Environment Harassment, the behavior must be “unwelcome.” This analysis involves numerous issues: Did the employee solicit or incite the conduct? Did the employee find the conduct offensive and repulsive? Did the employee participate previously in conduct that could be found to be harassing? Did the employee protest the objectionable conduct at the time it occurred? Merely because an employee does not report the harassing behavior does not mean that it was not unwelcome; the employee could have feared the consequences of such report.¹¹ Complaints of sexual

“The procedures for an office with only two or three employees differ substantially from the procedures and policies of large clinics. Physician employers can begin by being aware of the law and appreciating the risks associated with sexual harassment in the workplace.”

harassment will have to be examined on a case-by-case basis, evaluating all of the facts and circumstances.

Potential Liability

A Title VII “employer” is respon-

sible for its own harassing actions. Congress included "agents" in the definition of "employer" covered by Title VII; therefore, courts look to agency principles when determining an employer's liability for sexual harassment.¹² Thus, when a supervisor exercises the authority actually delegated to him by his employer, by making or threatening to make job decisions of his subordinates, the actions should be imputed to the employer. Applying these agency principles, it is the EEOC's policy to hold employers directly liable for Tangible Job Benefit Harassment.¹³

An employer may have derivative liability for Hostile Environment Harassment committed by its employees if the employer knew or should have known of the conduct, unless it took immediate and appropriate corrective action.¹⁴ Employers will not be strictly liable for Hostile Environment Harassment under agency principles, since this type of harassment is typically beyond the scope of a supervisor's authority.¹⁵ Agency principles are relevant, however, when analyzing an employer's knowledge. An employer will be imputed to have notice of harassing behavior if a supervisor participated in the behavior, the behavior was specifically brought to the attention of a supervisor, or the sexually harassing behavior was so pervasive that an employer should have known about it.

Suggestions to Avoid Liability for Sexual Harassment

Employers have a duty to take all necessary steps to prevent sexual harassment. This duty may be satisfied through various actions depending on the situation. At the

very least, employers may want to be aware of what conduct constitutes sexual harassment. Further action may involve discussing sex harassment with their employees, informing them of their legal rights and their employer's disapproval of such conduct.¹⁶ Physician employers with numerous employees may want to take more concrete steps, such as developing a clear nondiscrimination policy which defines both categories of sex harassment. A nondiscrimination policy will be more effective if it permits employees to report harassing conduct to persons other than their regular supervisors and provides that the employee will not be penalized in any way for reporting such conduct.

In addition, depending on the number of employees and the workplace environment, the physician employers may want to develop and communicate to employees a procedure for handling sex harassment complaints. If the need arises for such a procedure, it will be more effective if all employees are encouraged to use it and all complaints are investigated thoroughly and fairly.

Once a complaint of sexual harassment has been made, an employer should take immediate and effective corrective action.¹⁷ The degree of action required to be taken by the employer will depend on the specific circumstances, such as the seriousness of the harm suffered and the workplace environment. Examples of corrective action include oral warnings, written warnings, and discharge. By implementing some of the above suggestions, an employer may be able to avoid liability for sexual harassment, may reduce the likelihood of sexual harassment incidents, and

may prevent the filing of EEOC charges or lawsuits.

Conclusion

Sexual harassment has been around for a long time, and the basic definition of sex harassment and the employer's responsibilities with respect to sex harassment claims have not changed. Because of the recent events and the publicity focused on sexual harassment, the number of complaints with the EEOC and the number of lawsuits filed against companies may increase. Prudent physician employers will want to deal with the issue of sexual harassment today to avoid problems in the future. The extent to which employers should act to prevent sexual harassment depends on the individual circumstances. The procedures for an office with only two or three employees differ substantially from the procedures and policies of large clinics. Physician employers can begin by being aware of the law and appreciating the risks associated with sexual harassment in the workplace.

Notes

1. 42 USC § 2000e-2(a).
2. EEOC Compliance Manual § 615.3(a) and 615.6(a)(1).
3. 29 CFR § 1604.11(a).
4. 29 CFR § 1604.11(a)(2).
5. 29 CFR § 1604.11(g).
6. EEOC Policy Statement No. N-915.048.
7. 29 CFR § 1604.11(a).
8. *Andrews v. Philadelphia*, 895 F.2d 1469 (11th Cir. 1990).
9. *Arnold v. Seminole*, 614 F. Supp. 853 (E.D. Okla. 1990).
10. *Ellison v. Brady*, 924 F.2d 872 (11th Cir. 1991).
11. EEOC Policy Statement No. N-915.050.
12. *Mentor Savings Bank, FSB v. Vinson*, 477 U.S. 57 (1986).
13. EEOC Policy Statement No. N-915.050.
14. 29 CFR § 1604.11(d).
15. *Steele v. Offshore Shipbuilding, Inc.*, 867 F.2d 1311 (11th Cir. 1989).
16. 29 CFR § 1604.11(f).
17. EEOC Policy Statement No. N-915.050.

A#



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Contraindication: Known hypersensitivity to the drug. Because cross sensitivity in this class of compounds has been observed, H₂-receptor antagonists, including Axid, should not be administered to patients with a history of hypersensitivity to other H₂-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix[®] may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chloridazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A 2-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a 2-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a 2-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in 1 fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in 1 fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Worldwide, controlled clinical trials included over 6,000 patients given nizatidine in studies of varying durations. Placebo-controlled trials in the United States and Canada included over 2,600 patients given nizatidine and over 1,700 given placebo. Among the adverse events in these placebo-controlled trials, only anemia (0.2% vs 0%) and urticaria (0.5% vs 0.1%) were significantly more common in the nizatidine group. Of the adverse events that occurred at a frequency of 1% or more, there was no statistically significant difference between Axid and placebo in the incidence of any of these events (see package insert for complete information).

A variety of less common events were also reported; it was not possible to determine whether these were caused by nizatidine.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to 3 times the upper limit of normal, however, did not significantly differ from that in placebo patients. All abnormalities were reversible after discontinuation of Axid. Since market introduction, hepatitis and jaundice have been reported. Rare cases of cholestatic or mixed hepatocellular and cholestatic injury with jaundice have been reported with reversal of the abnormalities after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in 2 individuals administered Axid and in 3 untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of anti-androgenic activity due to nizatidine. Impotence and decreased libido were reported with similar frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Anemia was reported significantly more frequently in nizatidine than in placebo-treated patients. Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Urticaria was reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. The ability of hemodialysis to remove nizatidine from the body has not been conclusively demonstrated; however, due to its large volume of distribution, nizatidine is not expected to be efficiently removed from the body by this method. PV 2093 AMP [101591]

Additional information available to the profession on request.



US THEM



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**Highlights of the Annual Meeting will include
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Option 1: Medical Staff Bylaws: Principles and Practices

Medical Staff leaders will receive a practical overview of the purpose, function and organization of medical staff bylaws, including discussion of selected provisions regarding the Health Care Quality Improvement Act, provision for policy statements, and other relevant issues. Participants will have the opportunity to participate in discussion, and ask questions pertinent to your own institution. Speakers will include legal experts from the American Medical Association and from private medical staff attorney firms.

Option 2: Outcomes Management: A Medical Staff Issue

Medical staffs are confronted with increasing pressures to respond to patient care data that is being collected for outcomes measure, quality assurance, utilization review and for other hospital purposes in the interest of quality and efficiency. Medical staff leaders will be provided with a perspective in data collection and outcomes management, and will hear how to focus data collection for successful and appropriate application in the interest of improved patient care. Speakers will be physician experts in the field of outcomes management and total quality improvement.

For Information Contact:

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Epidemiologist — The Georgia Medical Care Foundation is the Peer Review Organization for the state of Georgia. The Foundation seeks an M.D. or Ph.D. epidemiologist to lead a new department that will conduct research related to improving patient care. Candidates should have an established record of scholarship, an interest in clinical outcomes research, and the ability to establish a research program with extramural funding. A background in measuring patient outcomes, evaluating risk-adjustment

techniques, analyzing medical practice variations, or testing new quality assurance methodologies is desirable. The Georgia Medical Care Foundation is an Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply. Send curriculum vitae to: Research Director Search Committee; The Georgia Medical Care Foundation, 57 Executive Park South, Atlanta 30329.

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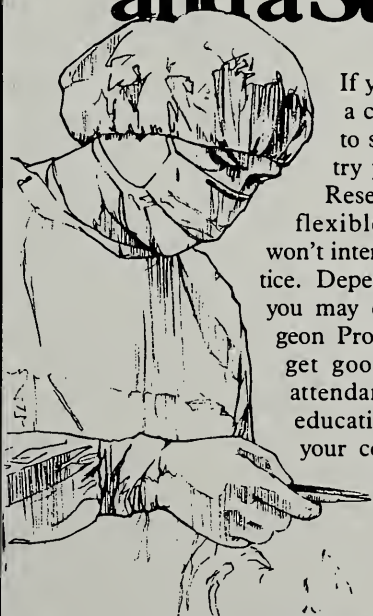
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ADVERTISING INDEX

American Medical Association	252
The Chattahoochee Bank	202
Classified Advertisements	253
Georgia Hospital Association	226
Health Quip, Inc.	226
The High Museum of Art at Georgia-Pacific Center Art and Medicine	215
Lilly, Eli & Company	250, 251
MAG Mutual Insurance Company	216
Palisades Pharmaceuticals, Inc.	226
Parke Davis	206
Postgraduate Medicine	251
Practice Management Services	232
Searle, G. D.	256
University Medical Center	204
U.S. Air Force	246
U.S. Air Force Reserve	253
U.S. Army	231
U.S. Army Reserve	255
Walton Rehabilitation Hospital	225

MANUSCRIPT INFORMATION

MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely to this *Journal*. **Manuscripts should be submitted on a 5¼" disc or a 3½" diskette compatible with IBM WordPerfect 5.1 or in ASCII format. Hard copy (double spaced, typewritten) should be sent with the disc/diskette.** Hard copy should be submitted in duplicate. Receipt of manuscripts will be acknowledged.

STYLE — Articles should range in length from 3000 to 4000 words. Footnotes, references, and photo legends should be typed on separate sheets, double-spaced. References should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages. **Articles with references that do not conform to the *Journal's* style will be returned.**

Sorter NA, Wasserman SI, Austen KF.
Cold urticaria release into circulation of
histamine and eosinophil chemotactic
factor of anaphylaxis during cold chal-
lenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

ILLUSTRATIONS — **Illustrations must be submitted in duplicate.** Illustrations, tables, etc., should bear the author's name and figure number. The cost of reproduction of illustrated material for publication in excess of three average illustrations and/or tables will be borne by the author, and the *Journal* will bill the author for this expense.

GENERAL POLICY — Authors will be given as wide a latitude as the general policy of the *Journal* and the demands on its space permit. The right to reduce, revise, or reject any material submitted for publication is always reserved. The *Journal* is not responsible for statements made by any contributor. All communications regarding editorial, advertising, subscription, and miscellaneous matters should be sent to the Managing Editor, 938 Peachtree Street, N.E., Atlanta, GA 30309-3990.

ADVERTISING — All pharmaceutical advertising must be approved by the State Medical Journal Advertising Bureau, Inc., to be acceptable for publication. Other advertising copy may be accepted subject to the approval of the Editor. All copy or negatives must reach the *Journal* office by the 20th of the month 2 months preceding publication. General and classified advertising rates will be furnished on request.

MEDICAL EDITING SERVICES — If in the opinion of the *Journal* Editorial Board, material submitted for publication could be improved by a Medical Editing Service, the Editor will contact the author for his or her approval. Association members needing assistance in preparation of material for publications may also use this service. A reasonable charge is made for this service and the cost of this will be borne by the author.

About the Cover Artist

Joe Wilder, MD

“**P**oussin used to say there were two ways of looking at things: one was to look and the other to look with attention. Dr. Joseph Wilder has spent his life looking with attention. His paintings, whether of boxers or baseball players or jockeys, show him attending to the peculiar gesture which lifts his athlete into the realm of perfection. His excitement, expressed through color and line, is the excitement of the connoisseur, and to some degree, his work is best appreciated by those who understand the beauty of an elegantly performed sport.”

(Dore Ashton, from *Athletes, Paintings by Joe Wilder, M.D.*)

JOE WILDER, MD, of New York City, is considered by many to be the finest painter of sports images in the world. His early educational activities, however, hardly presaged such a distinction. Dr. Wilder graduated from Dartmouth College with a bachelor's degree in English in 1942. He received his medical degree from Columbia University in 1945.

While at Dartmouth, he established five unbroken records in lacrosse. Because of this, he was elected to the Hall of Fame in lacrosse, making him only the second physician to be inducted into a Sports Hall of Fame for athletic ability. So much for Dr. Wilder, the athlete.

Dr. Wilder, the physician, became director of surgery at the Hospital for Joint Diseases in Manhattan in 1959, the year his first major book on surgery, *Atlas of Surgery*, was published. In 1980, he became professor of surgery and director of the outpatient department at Mount Sinai School of Medicine in New York. He became Professor Emeritus in July, 1990.

“I never took a formal art lesson in my life. The techniques I use for painting I learned in surgery. The use of the hands, for instance, but also perception, reading people, using my eyes. Most people never



train their eyes beyond the age of 3.”

Dr. Wilder painted his first piece of art 20 years ago while a resident at New York Hospital. “It was an 18th-story view of the 59th St. Bridge.” He continued to work in oils as an Air Force captain during the Korean War and later as a fellow in cardiovascular research at Karolinska Institute in Stockholm. “I never showed my work to anyone. It was a private thing with me.”

The first person to give him real encouragement was comedian Zero Mostel, who at one time was a struggling artist himself. “He had been run over by a bus, and a mutual friend asked if I could help him out. I operated on Mostel four times in 5 months. We became friends, and he invited me to his studio to work with him. After 2 months, I became totally hooked on painting. I rented my own loft and from that day on I became a serious painter.”

Last year, Dr. Wilder's first book on painting, *Athletes: The Paintings of Joe Wilder, M.D.*, was published. The Metropolitan Museum, the Museum of Fine Arts in Boston, and The Art Institute of Chicago are among the many prestigious museums in this country which have fea-

tured this book. A new book, *Surgical Reflections: Images in Prose and Painting*, due to be published in October, 1992, will feature essays by Dr. Seymour Schwartz and 100 paintings by Dr. Wilder of athletes, physicians, and still lifes.

Challenging the “tendency of society to stereotype,” he said, “has been the biggest battle of my life.” As an athlete, he encountered this attitude while he was studying to be a surgeon, and later when he turned to painting, “I was told I was out of my mind to think I would be taken seriously.” That view is a reflection of his major aim in life: to “draw people away from stereotypes. People can be myopic and compartmentalize everything in life.”

Dr. Wilder's art has appeared on the cover of the *Journal of the American Medical Association* eight different times, as well as on several other magazine covers. He is the only physician in this country to have had a major medical book and a major art book, both published to critical acclaim, in his lifetime.

Dr. Wilder lives with his wife in Manhattan. They have five children.

Legislative Seminar Set for July 31-Aug. 2

MAG is gearing up for another Legislative Seminar that will again take place at the King and Prince Hotel in St. Simons Island, Georgia. As this is an election year, it is important for you to become familiar with your legislators and the legislative process. The format will be similar to those in previous years. There will be a dinner on Friday evening, a Saturday morning session and evening poolside dinner, followed by a Sunday morning session. There will also be a children's program. Further information will be given about the program in next month's *Journal*. It is important that you make your reservations with the hotel as early as possible, since room availability is limited. Contact Viki Staley at MAG for details: 404-875-7535 or 800-282-0224

Membership Recruitment Incentive Award Program

MAG has begun work on a Membership Recruitment Incentive Award Program. Eligibility of those being recruited shall include only (1) active members, (2) those in their first and second years of practice, and (3) those who have dropped membership for 2 or more years.

Although the program is not yet operational, the following awards will be presented at the 1993 MAG House of Delegates meeting:

Any member who signs up 3-5 members will receive a 25% MAG dues rebate.

Any member who signs up 6+ members will receive a 50% dues rebate and a "Georgia Cup."

The three members with the highest number of new members will receive a "Georgia Cup." The

county society with the highest percentage of new members will receive a "Georgia Cup."

Results are to be administered and tallied at the county level and reported to MAG prior to February 1, 1993.

Please watch for additional information to be published in this Department of the *Journal*. When MAG and the county societies have worked out the details of this program, we will give you the details and tell you how to participate.

*It is the month of June,
The month of leaves and roses,
When pleasant sights salute the eyes,
and pleasant scents the noses.*

N. P. WILLIS: *The Month of June*, 1844

Growth, development, posture, like health, depends to a large extent on the freedom for the individual to join in any play, game or sport, to exert himself according to his powers, and to know when he has had enough. Food, fun and frolic are of more importance than drill and discipline.

H. A. HARRIS: *The Anatomical and Physiological Basis of Physical Training*, 1939 (British Medical Journal, Nov. 11)

*Th' athletic fool, to whom what Heaven denied
of soul, is well compensated in limbs.*

JOHN ARMSTRONG: *The Art of Preserving Health*, III, 1744

Honesty may be dear bought but can never be an ill pennyworth.

JAMES KELLY: *complete Collection of Scottish Proverbs*, 1721

There is no such test of a Man's superiority of character as in the well-conducting of an unavoidable quarrel.

HENRY TAYLOR: *The Statesman*, 1836

We are all Adam's children, but silk makes the difference.

THOMAS FULLER: *Gnomologia*, 1732

The words of a silent man are never brought to court.

DANISH PROVERB

Love withers under constraint: its very essence is liberty: it is compatible neither with obedience, jealousy, nor fear: it is there most pure, perfect, and unlimited where its votaries live in confidence, equality and unreserve.

P. B. SHELLEY: *Queen Mab*, notes, 1813

Gentlemen have ever been more temperate in their religion than the common people, as having more reason, the others running in a hurry. In the beginning of Christianity the Fathers writ Contra gentes and Contra gentiles; they were all one.

JOHN SELDEN: *Table-Talk*, 1689

In war trivial causes produce momentous events.

JULIUS CAESAR:

The Gallic War, I, 51 B.C.

The revealing of griefs is, as it were, a renewing of sorrow.

JOHN LYL: *Endymion*, III, 1591

The Era of Good Feeling.
The period from 1817 to 1824, when party enmities were abated in the United States; the term was first used in the Boston Centinel, July 12, 1817

Love is not altogether a delirium, yet has it many points in common therewith.

THOMAS CARLYLE: *Sartor Resartus*, II, 1836

Feeling is any portion of consciousness which occupies a place sufficiently large to give it a perceivable individuality.

HERBERT SPENCER: *The Principles of Psychology*, II, 1855

Introducing a New Department: INSURANCE and FINANCIAL

AS PART of our efforts to broaden our usefulness and appeal to members of the Medical Association of Georgia, we are initiating this new Department in the *Journal* to address a variety of issues related to medical malpractice, loss prevention, your financial well-being, tort reform, and improving the quality of medical care. Sponsored by MAG Mutual Insurance Company, the articles will appear monthly under the heading of INSURANCE or FINANCIAL and touch on a wide range of topics that affect the manner in which you practice medicine.

In addition to providing professional liability insurance, MAG Mutual feels that it has a definite responsibility to educate physicians

about various issues related to their practices that can improve the quality of patient care and minimize risks of medical malpractice. We are grateful to them for their willingness to sponsor this Department and help us better serve the interests of our readers. Some of the topics that will be discussed in the coming months include:

- Developing and protecting pension programs
- Careful handling of tax and estate planning
- Avoiding pitfalls emanating from the fiduciary responsibility of managing profit sharing and pension plans.
- Avoiding the principal causes of professional liability lawsuits
- The importance of careful doc-

umentation as a loss prevention tool

- Minimizing medication errors
- What to do when a claim is filed
- How to conduct oneself at a deposition and before a jury
- How Underwriting serves a role in improving patient care and reducing physician liability.

The *Journal* looks forward to working with MAG Mutual Insurance Company to publish articles of interest to our readers. If you have suggestions for articles or would like to have a particular subject discussed, please contact either the *Journal* or Dr. Charles Hollis, Jr., Chairman, MAG Mutual Insurance Company, 404-842-5600.

Re: Patient Advance Directives

Dear Editor,

It has come to my attention that *Patient Advance Directives*, specifically Durable Power of Attorney and Living Will, are being honored by some medical personnel and some health care facilities (doctors, hospitals and their staffs, and nursing homes and staffs). A case in point (several) are on transfer from a nursing home to a hospital, or from a hospital to a nursing home.

The *Patient Advance Directive* is legal statement that should accompany the patient and be effective for that person regardless of that person's location. It is universal and as such must be accepted regardless of the circumstance the person happens to be in.

Furthermore, nursing homes are under pressure to attempt resuscitation in every case of cardiopulmonary arrest (i.e., death) even though that person has an expected death from a condition for which resuscitation is useless. Some nursing homes are calling 911 to relieve themselves of the stigma and possible sanctions by regulatory bodies should they not make such an attempt.

And furthermore, there is the question of what is an "unattended" death. If the patient has an attending physician and has been under that doctor's care recently, then regardless of the location of death, and that physician is willing to sign the death certificate, that is an "attended death." The doctor does not have to be at the patient's side to be the attending physician.

And furthermore, though it is not the duty of the bedside nurse to pronounce a person dead, communication with the attending physician constitutes medical direction and that "telephone order" of the physician at that time should be treated just as any other physician's

order. The policy of that attending physician can be known to the bedside nurse and should be followed.

And furthermore, for many nursing homes, when a death occurs, the funeral home carries the body to the doctor's office or to a nearby hospital for the death to be pronounced, and so far as I know, no directive says this is improper or illegal. The hospital calls that attending physician to see if he will sign the death certificate, and may notify the Coroner's office because at the hospital the body is treated as a routine "dead on arrival" patient.

Finally, though this is directed to you, it applies to all 50 states, to the best of my knowledge, according to each state's laws.

Sincerely yours,
Robert M. Wester, M.D., Certified
Medical Director,
Christian City Convalescent
Center and
Arrowhead Nursing Home,
East Point

Re: Retraction in November, 1991, Issue

Dear Editor,

I would like to apologize to Dr. Burt Brent for neither having asked permission nor having given credit for using one of his cases (Figure 8) in my article in the November, 1991, issue of the *Journal of the Medical Association of Georgia*. My participation with the patient's care as Dr. Brent's fellow included pre-operative, intraoperative, and post-operative care, but I do not want to insinuate that I conceived this particular patient's operative plan nor performed the surgery. My purpose in using this case for the article was to illustrate how techniques pioneered and developed by Dr. Brent for congenital ear deformities such as microtia can be transferred to other ear deformities such as those seen in trauma. This case (Figure 8) demonstrated the idea

so well that in my enthusiasm I selected Dr. Brent's case over another of my own trauma cases I had performed in Atlanta.

Sincerely,
Mark M. Jones, M.D.
Plastic Surgeon, Atlanta

Re: "On Country Music—Of Who We Are and Who We Wish To Be"

Dear Editor,

Be kindly informed of my opinion that 90% of country music represents a vulgar and slouchy value system, whose songs and themes reflect the influence of their particular irresponsible and unacceptable lifestyles and life philosophies. Anyone who can sit and listen to 90% of it has, in my opinion, a perverted and immoral approach to life. The other 10% is absolutely excellent and reflects essentially the life themes that we have known to be reflected in most folk ballads through the years. That comment, however, unfortunately cannot be made for the remaining 90%.

Sincerely,
Wayne Hodges, MD, PsyD
Medical Director
Coastal Pain Center,
Savannah

Re: March Issue Kudos

Dear Editor,

I have often wanted to write you and tell you how much I enjoy and appreciate the articles which you publish monthly in the Editor's Corner. All of these articles are interesting and beautifully written. You really do have a way with words, and there is absolutely no question in my mind that you could be a full-time author ranking right up there with the very best of those who string interesting words together in a meaningful way. Thanks for all the many pleasures that I have had from reading your column.

The recent one on country music is one of the best. A composer that I appreciated for many years is Kris Christopherson, who knew how to suffer when he and I were both going through a divorce some 18 to 20 years ago. He lost his touch when he got happy and successful, but for a while, he was one of the best.

Thanks again for the many hours you spend giving us pleasure and looking after our interest.

Sincerely,
A.B. Conger, MD
General Surgery/Psychiatry
Columbus

Dear Editor,

Congratulations on a superb March issue. I think the articles by Faria and Young are a real contribution to the medical community in Georgia. It suggests to me that once a year, if possible, we should encourage an issue devoted to the history of medicine. In the hustle of our daily activities, we all too often forget the contributions of our predecessors which have shaped out thought philosophy and provide the basis of many of the things which we do and take for granted in our every day practice.

This is certainly one of the most interesting issues of the *Journal* I have seen in the last several years. Congratulations for an excellent editorial job. By the way, I enjoyed the Editor's Corner as well. Patsy Chine really is a classic in American Music.

Yours truly,
Fremont P. Wirth, MD, FACS
Neurological Surgery
Savannah

Re: Dr. James A. Kaufmann

Dear Editor,

There are times in every person's life, that are so crucial and meaningful, that they will never be for-

gotten. We both went through such a period of time a few months ago.

We feel that we should share this experience with the readers of the *Journal of the Medical Association of Georgia* so that the medical community in Georgia will have another reason to be so proud of one of its distinguished members and leaders.

We had Rachel's father (Dr. Meir Tseelim, a retired physician himself), who is 83 years old visiting us here in Atlanta for our son's Bar Mitzvah. He reached Atlanta after going alone through the missile attacks, living in the greater Tel Aviv area. About 6 weeks after his arrival, he did not feel that well. Yet, at that age, who does?

It was Dr. James Kaufmann, our dear physician and friend, who insisted on having his heart checked and re-checked, until it was found that an imminent open-heart operation had to be performed! Thanks to Dr. Kaufmann's vast medical knowledge and persistence in reaching the final diagnosis, Dr. Tseelim was successfully operated on and in due time. Considering the critical stage of his heart condition, there is no doubt that this surgery saved his life. He is now back in Israel, happy and well.

There is an old Hebrew saying: "Saving one life is like saving the whole world." We truly feel that this saying relates to Dr. Kaufmann. However, it is not only pure medical expertise that makes Dr. Kaufmann special to us, it is also the "human touch." His compassion, his encouragement, his willingness to invest endless amounts of time and energy — all of that helped us so much to go through this difficult time in our lives.

Thank you, Dr. Kaufmann, from the bottom of our hearts.

Rachel and Alon Liel
Consul General of Israel

Re: Journal Budget Cutbacks

Dear Editor,

This letter is to point to an observation about the *Journal*. The articles are good, the cover is always outstanding, and the editorials are well done. It is noticeable, however, that state news has been eliminated, advertisements are lessened, and general content is less.

The *Journal*, being a state journal, would seem to be more "state oriented" or provincial, if you will, with state news as a part of the *Journal*. This was noticeable, in particular, recently when a local physician died who had practiced here for 50 years. I thought it would be appropriate for the state news to be notified, but its not available anymore.

This is to register my protest.

One thought I have in mind that I shall do as I see detail men from the pharmaceutical companies, I'll request their reporting my interest in our *Journal* and considering more advertisements.

Sincerely,
Walter E. Harrison, MD
Family Practitioner, Moultrie

Re: Breast Implants

Dear Editor,

The silicone implant trial has concluded. Jurors Phil, Geraldo, Oprah, Connie, and Jenny have made their recommendations and Judge David Kessler read the verdict. Not guilty on the grounds of safety but guilty anyway because... well, we just don't think women should be allowed to have bigger breasts! On the issue of whether or not silicone gel implants are associated with autoimmune disease or cancer, panel chairwoman Dr. Elizabeth Connell, M.D., said, "At this point, we haven't seen concrete evidence of a cause-and-effect relationship." The American College of Rheumatology called the evidence used to

support such a link "hypothetical, circumstantial, or anecdotal." Nevertheless, despite these findings and the excellent 30-year track record of the devices, the FDA decided to seriously curtail their use based on . . . what? By imposing moral restrictions based on the motivation of the patient to have implants, the FDA has moved beyond the scope of its investigation. The "political correctness" of the patient's decision to use silicone gel breast implants was not the issue the FDA was asked to evaluate. To impose restrictions on this basis is blatantly discriminatory.

At his press conference, Dr. Kessler stated that the implant manufacturers "failed to prove the safety" of their devices. Well, how safe is safe? Apparently, Dr. Kessler feels that they are safe enough for post-mastectomy patients but not for cosmetic patients. This changes "the risk/benefit ratio" according to Dr. Kessler. If one of the concerns about silicone gel is that it might cause cancer, then why approve these implants for mastectomy patients who are already at higher risk for cancer. Why not require that these patients have saline implants as well? They perform the same function and are presumably "safer." After all, isn't breast reconstruction following mastectomy essentially cosmetic surgery too? It certainly isn't necessary for the patient's survival. If it's a question of psychologic benefit following mastectomy then why not allow small-breasted women the psychologic benefit of an improved body image as well?

To take a medical device that has been on the market for 30 years and implanted in two million women and call it an "experimental" product now is outrageous. If two million women isn't a large enough group from which to assess the safety of implants, then now large a group is sufficient? Furthermore, how are these numbers going to be

generated when the FDA has severely restricted use of the device.

A medical investigation seeks to gather as much data as possible and then formulate a conclusion *based on the facts*. Despite giving the appearance of a medical investigation of breast implants, the FDA, in fact, has done just the opposite. The facts do not support the conclusion. There is no basis for excluding women who desire cosmetic enhancement of their breasts from using silicone gel implants. If silicone gel implants are unsafe, then they are unsafe for everyone and should be removed from the market entirely until they are determined to be safe. If not, then they should be left alone. Both the American College of Rheumatology and the American Society for Plastic and Reconstructive Surgeons agree that further studies are needed; however, removal of silicone breast implants from the market is unwarranted based on the FDA's findings, and, in fact, may impede the gathering of future data.

The repercussions of the FDA's silicone gel decision will be felt for many years to come. Already there is a growing distrust of the medical establishment fostered by sensationalism and biased reporting by the press. Women, angry and confused by perceived mismanagement by doctors and implant manufacturers, are putting their trust in lawyers. The lawyers, in turn, have responded by organizing special implant litigation seminars, toll-free numbers, and implant lawsuit kits. Despite the FDA's inability to find fault with the implants, the whole affair has cast just enough doubt on the product to make these contingency fee lawyers salivate — guilt by innuendo. They are currently rounding up every woman with an ache and an implant for what promises to be a prolonged legal circus. Several implant manufacturers, either unwilling or unable to

withstand the heat, have already withdrawn from the market.

In terms of medical technology, the implications of the implant experience are frightening. Tied to the conviction of silicone gel implants by association is the use of silicone as a medical component. When asked about the use of silicone in medical products, Jerry Keuster of *Public Citizen* told *USA Today*, "I see the silicones coming off the market." This would include such silicone-containing products as: joint prostheses, heart valves, shunts, testicular implants, surgical drains, many medications, and even the recent *FDA-approved* Norplant contraceptive. In addition, syringes are coated with two to four milligrams of the same silicone gel as in breast implants. How long will it be before the lawyers start suing the makers and users of these products. After all, silicone is silicone, isn't it? It doesn't matter what form it takes. If a patient can have a reaction to silicone gel then why not silicone rubber.

Energized by the outcome of the silicone gel implant issue, Dr. Kessler has already announced upcoming investigations into hundreds of medical devices. If the FDA's management of the breast implant investigation is any indication, then medical science will be subjected to a biased inquisition from an agency run amuck. The plastic surgeons and implant makers expected a fair examination based on the clinical and scientific evidence. What they got was a media circus. They never saw it coming until it hit them. The message is this: the circus truck, driven by the FDA and fueled by *Public Citizen* and the contingency fee lawyers is still out there careening out of control. Who will be struck down next?

Win Pound, MD
Plastic Surgery, Atlanta

Re: April Issue

Dear Editor:

I would like to express my gratitude for the outstanding job that Susan Johnson and you performed in the publication of my four-part series on "The Forging of the Renaissance Physician." I would also like to thank the many colleagues who called or wrote me in the wake of the publication of the series.

As a result of this overwhelming response, I also wanted to expound on several items which were kindly pointed out to me by Dr. Arthur Singer, of Toccoa Clinic, for clarifications. For example, he wanted to let me know that his quotation, "Spend one hour with Venus, and the rest of your life with Mercury," came from the book *Story of Surgery* by Harvey Graham, an English writer. He also points out that Charles V was a devout and *pious* (not *pius*) Holy Roman Emperor, page 170. One page 166, he reminds us that Pope Leo X himself continued the policy of the "sale of indulgences" (not indemnities) to produce funds for the completion of the great St. Peter's Cathedral in Rome.

Finally, he elaborates that as far as the Tudor succession in England, after King Henry VIII died in 1547, he was followed by his young son Edward VI from 1547 to 1553. Mary Tudor followed from 1553 to 1558. I would like to interject here that before Mary Tudor or "Bloody Mary" ruled, the young Lady Jane Grey ruled briefly for 9 days in 1553. Elizabeth I was then queen from 1558 to 1603. She was succeeded by James I who came down from Scotland to being the line of Stuart kings. James I was the son of Mary Queen of Scots. Mary Queen of Scots, you will remember, was beheaded by Queen Elizabeth I in 1587. In my original text, I only gave a panoramic view of the most powerful monarchs and patrons of the Renaissance. I did not mean to im-

ply that King Henry VIII was immediately succeeded by Queen Elizabeth I. Nevertheless, my thanks to go Dr. Singer for his interest in medical history as well as for these suggestions and clarifications.

Given the warm enthusiasm that this series has generated from the readers of the *Journal*, I would like to add the following notes which due to editorial considerations necessitated omission from the original text. Regarding Galenic medicine and the Doctrine of the Four Humours, the reader may be surprised to know that bloodletting and the careful examination of the pulse as espoused by Galen, are still practiced *today* in the remote country of Bhutan in the Himalayas as reported in a recent issue of *National Geographic* in May 1991.

Regarding the great Islamic physician, Avicenna, at least one recent physician-scholar asserts that the poetry attributed to the obscure Arabic poet and astronomer, Omar Khayyam (c. 1050-1120), was actually written by our colleague Avicenna. (See Reference #13, Part I).

In Part II, "The Philosophic Basis for Pre-Renaissance Medical Knowledge," the numerical reference (#11) by Dr. Harry Bloch was omitted in the text, though it was included in the list of references. The attribution here is on page 126. It is in reference to Francis Bacon, "in effect, he revived the philosophy of his namesake Roger Bacon . . . who had unsuccessfully called for scientific experimentation almost three hundred years earlier."¹¹

Finally, regarding *Theriac* (See Figure 3, Part I): the earliest information is that this concoction originated from a poison antidote that was developed by King Mithridates VI of Pontus, who was Rome's great arch-enemy. According to legend, he took small amounts of poison to develop resistance against potential assassination attempts. After he was defeated by Pompeii and

threatened by his own troops, he unsuccessfully tried to poison himself. Finally, he ordered one of his soldiers to dispatch him with a sword. After his death, his antidote was "rediscovered" and used as *Theriaca* (also *Theriac* or *Theriacum*). The word itself is derived from the Greek for "wild beast," and it was coined by Nero's physician, Andromachus, after he added viper's flesh to the preparation.¹⁰ The recipe for this concoction varied from a mixture of several ingredients to a "pharmacological monstrosity"⁹ that contained fifty to eventually hundreds of ingredients. It was used as a panacea for a variety of illnesses over the succeeding centuries. (References cited refer to Part I in text).

I look forward to writing more on medical history as well as pertinent socio-political issues that are of concern to my colleagues, and hope that I may be able to encourage others to join in the fight for the study of medical history, the preservation of the practice of medicine, the sanctity of the patient-doctor relationship, and the time-honored ethics of our noble profession.

Miguel A. Faria, Jr., M.D.
Clinical Associate Professor of
Surgery (Neurosurgery)
Mercer University School of
Medicine, Macon

*The female contains all qualities,
and tempers them — she is in her
place, and moves with perfect bal-
ance;*

*She is all things duly veil'd — she is
both passive and active.*

WALT WHITMAN:

I Sing The Body Electric, 1855

*To be honest, as this world goes, is
to be one may picked out of ten
thousand.*

SHAKESPEARE: *Hamlet*, II, c. 1601

*So many men, so many opinions.
(Quot homines, tot sententiæ.)*

TERENCE: *Phormio*, II, c. 160 B.C.

Betrothal

I walked into the earth's vast
solitude—
The day was but a shudder from
awaking—
The misty gown of morning opened
wide
To caressing winds and fingers of bright
sunlight;
There from bosomy hills so sweet and
chaste
I lifted my eyes to say my vow of love.
Flush of cheeks and blush of dawn were
matched

Across a wordless infinity of space.
Across the yearning years I pledged my
troth;—
I pledge it now with every waking
dawn!
As day throws back the covers of the
night
To lie in beauty, silent, innocent,
Awaiting my look, my smile, unspoken
call,
I give my heart in barter for it all.

Experiment in Monotony

Life should have surprises.
It's no good
to know just what tomorrow holds,
and worse of all
to know tomorrow always brings
a repetition of today.
Life should have variations,
ebb and flow
of noise and light
heat and cold
love and hate,—

tides—
lapping sands of perception
Splashing waves of thought
on shores
of consciousness—
beauty overlapping the pain, but—
life should have a sense of doubt,
of wondering,—
and every now and then—
of wonderment!

JOHN RANSOM LEWIS, MD

Dr. Lewis, a plastic surgeon in Atlanta, is Georgia's Poet Laureate.

Of Our Color

Charles R. Underwood, MD

I believe in the supreme worth of the individual and in his right to life, liberty, and the pursuit of happiness.

I believe that every right implies a responsibility; every opportunity, an obligation; every possession, a duty. I believe that the law was made for man and not man for the law; that government is the servant of the people and not their master.

I believe in the dignity of labor, whether with head or hand; that the world owes no man a living but that it owes every man an opportunity to make a living.

I believe that thrift is essential to well-ordered living and that economy is a prime requisite of a sound financial structure, whether in government, businesses, or personal affairs.

I believe that truth and justice are fundamental to an enduring social order.

I believe in the sacredness of a promise, that a man's word should be as good as his bond; that character — not wealth or power or position — is of supreme worth.

I believe that the rendering of useful service is the common duty of mankind and that only in the purifying fire of sacrifice is the dross of selfishness consumed and the greatness of the human soul set free.

I believe in an all-wise and all-loving God, named by whatever name, and that the individual's highest fulfillment, greatest happiness, and widest usefulness are to be found in liv-

ing in harmony with His will.

I believe that love is the greatest thing in the world; that it alone can overcome hate; that right can and will triumph over might.

JOHN D. ROCKEFELLER, JR.

SHE WALKED INTO the family dining room, quietly but with a sense of personal worth not always present in the "colored" of the society. Short and heavy with the apron bridging the more than ample abdomen. Sweating. "I'll bring the biscuits when I gits 'em out of the oven." The remark was directed at the family patriarch enthroned at the head of the Sunday dining table. Church was over, and the children and grandchildren sat about the table now hushed by the perceived impertinence of the colored "servant." The crystal water pitcher, always at his right hand, arched through the air narrowly missing her head as it shattered against the wall. "You will get the goddamn biscuits when I tell you to," he shouted. An uneasy quiet fell over the gathering. The children looked at the floor as if searching for answers or else a way out of the hostile environment. Their introduction into race relations as molded by the actions of their elders, those more "mature" than they, had taken yet another step toward disaster.

He ruled the family with iron-

fisted certainty, this patriarch did. It seemed reasonable. After all, he had started the family business from which they all prospered. It was his confidence in himself and his always sure materialistic judgment which led social and business associates alike to seek him out. They trusted him and supported him while he returned to them their livelihood. No uncertainty in this man. His world was black and white and so was his view and his conduct in race relations.

As a child, one found it comfortable and reasonable, certainly less confrontational, to place this man on a pedestal exemplifying the manner in which to conduct one's own life. A softening of the harshness of the dining room incident could be seen in the tolerance and respect he extended to the Negro, Fred. Tall and black, stooped and bent, Fred carried out the manual labor about the place with little reaction toward directives than a "yassum" or "yassir." He was what the patriarch would call a "good nigger." The same was accorded Mary Bliss who arrived early in the morning as a young teenager, stayed until late in the afternoon, and tended to the cleaning chores of the house. He bragged on her as she left the small town to gain a college degree, later to see three children of her own do the same. He seemed to feel that there was a "place" for the colored race in our society if only they would stay in

that "place." And yet, beneath the veneer of confidence and certainty, there seemed to be the nagging worry that the "place" was not clearly defined nor any secure insurance that the "colored" would stay there if so confined. It was then an amalgam, a restless amalgam as I saw it then, and look back upon the man in later years. Careful introspection followed, for in this world of focused adulation my mother, the daughter, had named me for him.

And so, this last week in April, 1992, with the air full of aroma and the beauty, the hope, of Spring, I thought of my grandfather as the tragedy of yet another racial confrontation burned in Los Angeles and shattered windows and human relationships in Atlanta. I wish not to debate the right or wrong of Rodney King or the police. Enough has been said of them and too many have told me how I should feel and react.

I must now retreat into my own reflective world and search for meaning if not guidance. There, I find, as do so many whose early formative years in both the North and the South molded their racial

attitudes, the haunting thought and worrisome fear that although "equal opportunity" has become a legislative mandate, recognizing that "whites only" signs on water fountains and rest rooms are but an archaic relic of our past, there yet simmers threateningly, barely below the surface of our societal harmony, an antagonism, a distrust, and hatred between the races belying that harmony.

My thoughts bring again to mind the reality of a State, ours, which continues to find a need for two separate State medical societies, one for "whites," one for "colored." Solace of some slight degree comes to me as I think of my own children going to school with, playing with, and being in geographically similar neighborhoods to the "colored" of our town when my own youth was denied these. I sense that there is hope for us all in the racial attitudes and acceptance of our children, both black and white. My comfort level swells, and then the hatred in the eyes of the mob in Los Angeles and the sneer of those in Atlanta clouds my vision. The crystal water pitcher shatters on the wall of my grandfather's dining room.

Perplexed, bewildered, and confused though we be, there is but one course left to us and it involves more determination and renewed effort to reconcile our differences. On second thought, that sounds as though it flaunts reason. Perhaps the proper path would be to recognize and accept our "differences" and with greater sincere determination work at reconciling our hatred. That is the first step and only when it has been taken can we progress to rectifying the issue of inequality of opportunity for both white and black. I, too, have heard all the cliches, and perhaps have used them — "There are plenty of opportunities. We just need a better quality of white or colored person able to recognize them" — that kind of talk. I also recognize that we have made considerable progress these past few years. I am aware of these things, and yet there is an uneasiness which tells me that unless we build on these past successes and effectively resolve the hatred and the inequities, we shall some day observe the tragedy in Los Angeles and Atlanta again. Not this time on the television screen but rather in the homes of each of us. And in living color.

Introducing This Issue

Jack C. Hughston, MD

THE MEDICAL ASSOCIATION of Georgia has been at the forefront in the development of Sports Medicine since it began in the last half of this century. Since that beginning, Sports Medicine has become a major subdivision of numerous specialty fields in medicine and in paramedical organizations.

This issue of the *Journal* commemorates that beginning and brings us up to date in a few areas of the field of Sports Medicine. This field is now too broad for a single issue to incorporate fully. Thus, the material included herein is devoted to those areas of primary prevention and treatment that have proven to be of immediate benefit to the athlete. Unfortunately, space also does not allow the inclusion of reports by many of the physicians in Georgia who have contributed significantly to the well-being of our athletically involved population.

There is not one of us who can be sufficiently knowledgeable to be able to provide the broad spectrum of prevention and care in the field of Sports Medicine. Those of us involved in this work have constantly had to learn and stay abreast of the basic fundamentals of many specialty areas in order to cooperate effectively and refer the athlete to those working in the field of medicine appropriate to the athlete's need.

The Early Days

The Medical Association of Georgia

‘In 1960, MAG conducted one of the first Sports Medicine conferences devoted to the prevention of illness and injury in the athlete. Dr. Grady Black and his committee were instrumental in this seminal event. 9

gia conducted one of the first Sports Medicine conferences devoted to the prevention and treatment of illness and injury in the athlete. In the 1950s, it was somewhat unethical in the eyes of the medical profession for a physician to be on the sidelines of sporting events for the purpose of rendering care to the athlete. I had been stumping the State speaking to county medical associations, urging them to put aside these ethical barriers and have some of their interested members attend and participate in the care of the athletes on the high

Dr. Hughston has graciously served as Guest Editor of this Special Issue of the *Journal*. He is Chairman of the Board of the Hughston Orthopaedic Clinic, PC, in Columbus and Clinical Professor, Department of Orthopedics, Tulane University School of Medicine, New Orleans, LA. Send reprint requests to him at P.O. Box 9517, Columbus, GA 31995.

school teams in their respective communities.

This action by these physicians began to do so much in the way of good public relations that Dr. Grady Black, of the School Child Health Committee of the MAG, asked that we put on a postgraduate conference on the Medical Aspects of Sports. He and his committee felt that such a course would further stimulate the interested physicians and would bring the coaches, physicians, educators, trainers, physical therapists, and others together to create a mutual understanding of each other's role in the care of the athlete. The primary objective was to develop ways to prevent illness and injury and secondarily to promote intelligent treatment of any medical illnesses and injuries that might occur.

At this time, high school athletics was the focus of attention, and even today the high school arena is where the most action is. Concentration in the high school arena basically formulates the area of most benefit, not just for the athlete while he or she is in high school, but also in their future lives as college, professional, and recreational athletes. This can be attributed to the education and awareness instilled at the high school level.

Thus, in response to Dr. Grady Black and his committee, we conducted the first postgraduate

conference on Sports Medicine in Columbus, Georgia, on August 12-13, 1960, in association with the Georgia High School Athletic Association, the Georgia Athletic Coaches Association, the Georgia Department of Public Health, and the Georgia Department of Education. The conference was well attended by approximately 300 physicians, coaches, educators, and other interested persons. The results of these discussions and presentations were both immediate and far reaching. Most of the preventive measures instituted then continue to be used today.

“Most of the preventive measures instituted at the 1960 conference continue to be used today. Another positive effect was the requirement that a physician be present on the field of play during games.”

One major reason for the considerable impact of this conference on prevention of illness and injury in high school athletes was that Sam Burke, of Thomaston, was President not only of the Georgia High School Athletic Association but also happened to be President of the National High School Federation of Athletics. Thus, all of the high schools in the United States were affected by the changes that were taking shape at that meeting.

Victor Giustina, D.D.S., of the Public Health Department in Augusta, presented the considerable advantages of mouthpieces in protecting players' teeth from being broken and knocked out. It was almost incidental, but extremely im-

portant, that the mouthpieces also helped absorb the force of blows to the player's mandible, thereby reducing the transmission of force to the brain through the temporomandibular joint. Cerebral concussions resulting from high school football were thereby minimized. The reduction of dental injuries reduced health care costs related to high school athletes by 4%. Within 12 months following this conference, mouthpieces were mandatory for high school athletes throughout the United States. Colleges and professional teams joined in using mouthpieces as these young high school players grew up to those ranks.

The Georgia Department of Education was at this time attempting to reduce the cost of high school athletics by reducing the preseason training period to 1 week from the prior allowance of 2 weeks. At the conference, however, they were made aware that the increased fitness of the athlete as a result of preseason conditioning reduced injury and illness, particularly heat illness. This influenced the Department of Education to extend the preseason to 3 weeks rather than reducing it to 1 week. The benefits of this improved conditioning reduced rather than increased costs.

Another positive influence which came to the forefront of the conference and quickly engulfed the United States was the requirement of having a physician present on the field of play during the period of game participation. The learning that physicians gained as a result of this involvement resulted in much progress in illness and injury prevention over the next few years. This included considerable improvement in protective equipment and in changing techniques of blocking and tackling that were hazardous.

Dr. W.E. Lewis, of Macon, had

been on the field with high school teams for years. He presented factors related to chest and abdominal injuries. Dr. John (Bud) Robinson, of Americus, discussed the importance of the preseason history and physical examination and of knowing the personalities of the players on the team. Some players "pained" easily with the slightest bruise or twist, whereas others did not "pain" and wanted to keep playing, even with a serious injury.

Several other noted physicians and coaches made considerable contributions to this conference in 1960. Truly, it was a great happening, and the Medical Association of Georgia should be proud to have played such a large and important role in the beginnings of Sports Medicine as we have come to know it over the past 40 years. Since Georgia has been in the forefront in Sports Medicine for decades, it is fitting that the Olympics will be here in 1996.

This great stimulation of interest and involvement over the United States quickly spread to other less combative sports such as baseball, basketball, track, swimming, wrestling, ice hockey, etc. Improvements in prevention and health care spread like wildfire over the next few years.

“As there was no way to address every sports activity in this issue, the presentations are on an anatomic and physiologic basis, each of which will fit into multiple sports.”

The American Medical Association formed a Committee on the Medical Aspects of Sports at the

same time our organization did. They began coordinating the efforts of medical specialties and the efforts of all organizations related to Sports Medicine. The American Academy of Orthopaedic Surgeons established the Committee on Sports Medicine in 1964 or 1965 and began postgraduate courses relative to the treatment and prevention of musculoskeletal injuries as well as involvement in the general field of Sports Medicine. The National Athletic Trainers Association had continued to organize its educational program in the last few years of the 1950s. Their organization became an affiliate of the American Medical Association somewhere around 1963.

Though we began with the major focus on the high school athlete, Sports Medicine quickly extended even to becoming a major support element to the Olympics, then to the recreational athlete, and now has become important in the life and well-being of the Golden Age Athlete. Sports Medicine still extends further.

Back to the Future

This, then, is a brief introduction to the beginnings and development of Sports Medicine. Now, today, is there a reason for this issue? Yes. Sports Medicine is not static — it's dynamic. Progress is continuous, though it may be in spurts and bounces. Thus, some of that prog-

ress is presented by the authorities in this issue. No single issue could present all the advances in experience and knowledge.

Some readers may feel that their favorite sport or group of sports has not been addressed. There is no way we could present walking, jogging, running, cycling, snow and water skiing, tennis, golf, softball, soccer, Olympic and recreational sports. The presentations are on an anatomic and physiologic basis, each of which will fit into multiple sport areas.

We hope you enjoy the excellent presentations of the authors who graciously contributed to this Special Issue of the *Journal of the Medical Association of Georgia*.

American Medical Association

Physicians dedicated to the health of America



For Your Benefit

American Medical Association Survey Monitors RBRVS Activities

The American Medical Association is polling state medical associations and large group practices to determine if they are experiencing problems with the Medicare physician payment reform system. The survey, mailed in March, is a response to a Board of Trustees Report adopted by the House of

Delegates at the Interim Meeting. The report asked the AMA to monitor the implementation of the resource-based relative value scale to make sure that carriers conform to Medicare law. The AMA will release follow-up surveys at three month intervals.

Despite Concerns, AMA Sees Benefits In Regional PRO Centers

HCFA intends to establish regional centers to abstract PRO data. Peer review organizations will continue to act as the liaison with hospitals and medical staffs. PROs will continue to perform individual case review. But the regional or multistate Clinical Data Abstraction Centers, or CDACs, will assume responsibility for collecting information from the PRO's medical records. The CDACs will prepare data for the Uniform Clinical Data Set, UCDS, HCFA's computerized review system. The AMA believes:

- CDACs may improve overall accuracy of the data set.
- The regionalized approach would make it easier for researchers to compare physician and hospital profiles from different states.
- The centers could reduce the amount of hospital record review conducted by PROs.

But the AMA has concerns about the agency's implementing a vast, untested system. The AMA advised HCFA to maintain local arrangements while developing regional centers.

The Preparticipation Screening Evaluation

John M. Henderson, DO

Introduction

THIS PREPARTICIPATION screening evaluation has been investigated, debated, and reviewed in great detail in the past decade.¹⁻⁴ Representatives of the American Academy of Pediatrics, the American Osteopathic Academy of Sports Medicine, the American Orthopaedic Society for Sports Medicine, the American Medical Society for Sports Medicine, and the American Academy of Family Physicians have approved a monograph* detailing this activity.⁵ The following is a synopsis of this monograph. The model on which this was developed is the format used and refined by the Institute of Athletic Health Care and Research (IAHCR), a non-profit entity within the Hughston Sports Medicine Foundation of Columbus, Georgia.^{6,7} Each year the IAHCR evaluates over 2,500 student athletes. From this experience and from the most recent data base generated on over 10,400 athletes come these guidelines.

This "preseason exam" is not intended to take the place of routine health maintenance or preventive

Several sports-related organizations have recently approved a monograph detailing the preparticipation screening evaluations. This article offers a synopsis of that monograph.

care by the athlete's personal physician. The focus, extent, and objectives of the personal physician's evaluation and the preseason evaluation do not overlap enough to make them interchangeable. The responsibility of the health care team is to maintain the health and safety of the student athlete.

Objectives

Primary Objectives

1. Detection of any condition

that may limit an athlete's participation.

2. Detection of any condition that predisposes an athlete to injury during practice or competition.
3. Meeting legal and insurance requirements for the school and athlete.

Secondary Objectives

1. Determination of the general health of the athlete.
2. Discussion of health-related questions with the athlete.
3. Assessment of physical maturity.
4. Evaluation of the level of fitness and assessment of the athletic performance of the athlete.

Ultimate Objectives

1. To develop sports-specific evaluation profiles.
2. To develop standards and norms for age-related groups.
3. To conduct epidemiologic studies on sports injury prevention based on the preparticipation data.

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4. Refine the disposition and clearance process.

Timing of the Evaluation

Ideally, the preparticipation evaluation should be performed at least 2-6 weeks before training and practice begin for the season. This allows time for correction of the identified problems, including rehabilitation if necessary. We typically divide the athletes into two groups: athletes in autumn sports (football, cross country, marksmanship) and athletes in winter/spring sports (golf, track and field, swimming, soccer, basketball, wrestling, baseball, tennis). The former are evaluated in July, the latter in October.

Frequency of Evaluation

Frequency of evaluation varies from state to state, based on state requirements.^{4,8-10} Some states require that full examinations be done annually, others require entry-level examinations with updates, and others have no requirements. In the ideal situation in

It is crucial that this evaluation take place, because it can become the foundation on which future participation in a sports career is built.

which there is continuity of care, either through the same physician performing succeeding evaluations or through the availability of medical records, an entry-level full evaluation with an annual limited re-evaluation is suggested. In situations in which continuity of care is not provided, either by the physician or through the availability of previous records, a complete annual screening is suggested.

We perform a full entry-level examination and annually retest in any problem area with emphasis on areas in which there has been injury. We test the fitness parameters on everyone annually so we can track various changes.

Methods of Evaluation

The preparticipation evaluation can be performed either in the physician's office or in the mass screening station-to-station setting.¹¹⁻¹⁴ There are advantages and disadvantages to both methods.

If evaluation is in the physician's own office, familiarity with the patient is a major advantage. Also, health-related concerns can be addressed during this visit, especially in sensitive areas such as alcohol and drug use and sex-related issues.

However, there are some disadvantages to this type of evaluation. These include the fact that many athletes lack a personal physician and some cannot afford comprehensive medical care. Also, the physician with a busy schedule is not always available to perform these evaluations before the scheduled deadline. Furthermore, many physicians do not have the same level of familiarity or interest in sports and sports-related problems, which can make clearance become a problem because of the lack of uniformity. Cost may be a factor, since performing this type of evaluation in an office may be cost-prohibitive to many. Even if the student is covered under the parent or guardian's insurance policy, most policies do not cover this evaluation. Additionally, if care is not taken, communication may be lost between the physician, coach, trainers, athlete, and the athletes' parents or guardians. This line of communication is immensely important if any problem needing follow-up or warranting limited participation is identified.

The station-to-station type of mass screening evaluation is an

evaluation format that allows many specialized personnel including physical therapists, exercise scientists, athletic trainers, and dietitians to be included very easily in the evaluation process. Physicians who

This "preseason exam" is not intended to take the place of routine health maintenance or preventive care by the athlete's personal physician.

are interested and knowledgeable in the area of sports can be involved. These evaluations can be very efficient and cost effective. Contact with coaches, athletes, administrators, and the medical team that will be caring for the athlete on a daily basis is easier in these settings.

There can be disadvantages to this type of examination, however. The setting is generally not ideal for medical evaluation because in large rooms there is excessive noise. Additionally, the environment is not such that sensitive issues can be discussed. Continuity of care can be a problem with mass screenings since the physician may not have prior knowledge of the athlete's medical conditions. Further evaluation of problems that are identified during these evaluations may "fall through the cracks" if there is a failure to communicate with the athlete's own physician. Unless proper care is taken, communication between the evaluating physician, the athlete, and the athlete's parents or guardians may not occur. Another disadvantage is that mass evaluations can become somewhat rushed, leaving the physician without adequate time to investigate other problems.

To circumvent all of these problems, we have paid fastidious atten-

Table 1 — Guidelines for Pursuing Evaluation of Heart Murmurs Found During the Preparticipation Screening Evaluation.¹⁹

Quality	Harsh or rough
Timing	Diastolic, holosystolic, late peaking systolic
Radiation	Carotid, axilla, back, infra-clavicular
Intensity	> grade 3/5
Associated findings	Thrill, heaves, pulse discrepancies
Maneuvers	Intensifies with Valsalva or exercise

(All diastolic murmurs are referred for further evaluation)

tion to detail. When we see a large number of athletes at one time, we use queuing lines, noise discipline, chaperons, and a fairly regimented set up of stations to make sure that we maintain quality as we control the quantity. In our community, the generous involvement of many physicians and almost 200 non-physician allied health professionals has made the mass screening format work well. We have confirmed our practice using a quality control study.

Medical History

As is the case with all medicine, the medical history is the keystone of the preparticipation screening evaluation. A form has been developed so as to obtain adequate information in a space efficient manner. Questions should be asked concerning hospitalization, surgery, medication, allergies, immunizations, and vaccinations. Direct questions should be asked concerning cardiovascular problems, especially exertion-induced chest pain, lightheadedness, wheezing, dyspnea, coughing, and family history of cardiovascular disease that includes premature death and cardiac events.

Also, questions should be raised concerning neurologic problems such as head injury, concussions, seizures, and stingers. Questions should be provided to investigate skin problems, heat illnesses, respiratory problems including exercise-induced asthma, musculoskeletal

injuries, and other specific medical problems such as infectious mononucleosis, diabetes, and seizure disorders.

There should also be inquiries on the use of special equipment such as special pads, braces, or other equipment modifications. The form should provide for information on any medical problems or injuries since the athlete's last physical examination. The menstrual history of female athletes should be obtained. It is not present on the form, but questions should be posed concerning the use of alcohol, tobacco products, and other drugs by the athlete.

Physical Examination

The physician should remember that the physical examination is for screening purposes rather than for a comprehensive medical work up. The screening examination should include measurement of height, weight, pulse, and blood pressure. Body composition is measured by estimating body fat content. We routinely use the SKIN-DEX® method of measuring skin-fold thickness to estimate body fatness. This is comparable to underwater weighing and much more logistically feasible. We have found that adolescents perform optimally at a fat content of 10-12% for males and 18-20% for females.^{6,7} In some sports a greater mass, including fat, is preferable to a lean somatotype.

The face, eyes, ears, and nostrils are evaluated for symmetry and

function. Auscultation of the heart (Table 1) and lungs and palpation of the abdomen and genitalia are worthwhile. Evaluation of the skin of the face, trunk, and distal limbs should also be done.

The musculoskeletal screening includes a 13 point format with complete examination of individual joints as indicated by the history and physical.¹ The joint areas are evaluated for contour, symmetry, deformity, muscle tone, joint capsule tightness, and soft tissue contractures. Range of motion, joint stability, manual muscle testing, and neurovascular assessment complete the musculoskeletal screening. The 13 point screening format includes examination of the cervical spine, lumbar spine, the shoulder, the elbow, the wrist, the hands and fingers, the hip, the knee, the ankle, the subtalar joints, the foot, and lastly, gait and stance. Oral and dental screening rounds out the physical examination.

Many physicians do not have the same level of familiarity or interest in sports and sports-related problems, which can make clearance become a problem because of the lack of uniformity.

In the physical examination, there should be a search for 1) abnormalities of one of a paired organ system, whether it is functional or structural (blindness, cryptorchidism, etc.) 2) congenital or acquired abnormalities (ventricular or atrial septal defects, hypertension, splenomegaly, a gravid uterus, brachial plexopathy), 3) suspicious cardiopulmonary problems (idiopathic hypertrophic sub-aortic stenosis, bronchospasm, cardiac val-

THE SPECTRUM OF PROFILES

	LINE	TE-LB	OB	DB-WR	
Body Weight	Heaviest			Lightest	
Body Fat	Most			Least	
Hand Grip	Best			Worst	
Ball Put	Best			Worst	
Pull Ups	Worst			Best	
Latch Run	Worst			Best	
Vert Jump	Worst			Best	

← P-PK →

Figure 1 — From Jacko et al.¹⁸ "Profiles of All-Star High School Football Players."

vular disease), 4) untreated old injuries (joint instabilities, deformities), and 5) loose mandibular teeth that could become an airway foreign body.

Tests

There have been many tests "suggested as necessary" during the preparticipation screening evaluation.^{8,13-15} Some feel that hemoglobin/hematocrit, urine dipsticks, electrocardiograms, echocardiograms, and exercise stress tests are indicated or even mandatory for athletes. At this time, there is not sufficient evidence to include any of these tests as mandatory; they are performed only as indicated through the history and physical findings.

Bayes' theorem should be remembered. Laboratory tests are

very poor screening tools. False positives arising from the high sensitivity but poor specificity of laboratory tests, as well as logistic problems in performing the tests and cost effectiveness are problems in "screening." This should not be confused with our agreement that every student athlete should know their cholesterol profile. That evaluation is best placed in the care rendered by their personal physician.

Fitness Testing

Quantitating athletic performance is gaining importance because of the continued desire of athletes to be "stronger, faster, and jump higher." Sports-specific testing is being developed as we learn more about the sport science involved in the complex actions of each sport.^{5-7,16-20} The most useful

tests include measurements of flexibility, strength, power, speed, agility, and balance. We have seen that high school athletes, football players in particular, mirror their professional counterparts in these parameters (Figure 1).

Flexibility

It is important to evaluate athletes' flexibility in all areas. Shoulder internal and external rotation combined with adduction and abduction are necessary in the throwing, racket, and club sports. Hip flexion and extension, as well as internal and external rotation, are essential in running and kicking sports. Hamstring and heel cord tightness assessments should be performed to ensure flexibility in these areas. A horizontal sit-reach test is used to measure low back and hip flexibility.

Speed

Speed can be evaluated by having the athletes run both short distances (a 20-meter burst run) and long distances (a 2-mile run). Agility tests (latch run and figure 8 run) are also useful. Space limitations and time demands can limit the use of these tests, but as an "intake inventory" they can give the coach and athlete much information.

Strength

Strength is the ability to displace a resistance or mass. Strength is measured as absolute or relative, depending on whether the resistance is standardized (a hand dynamometer) or athlete specific (vertical jump). These have been linked to body mass in that the former increases directly, while the latter is inversely related.^{16,18}

Power

Power is the ability to display strength per unit of time. This parameter is measured by the use of simple activities such as completing repetitions of pull-ups, chin-ups, or push-ups over time. The vertical jump reach and the 4 kilogram

ability to sustain prolonged activity using large muscle groups. We typically use a 2-mile timed run test, or measure how much distance can be covered in 12 minutes. Anaerobic tests measure shorter bursts of activity. A 40-yard dash for time or a 45-second sprint on a stationary bicycle that measures watt generation can be used. Aerobic fitness is best tested using the 12-minute test, whereas aerobic endurance is best tested using a 30 or 60-minute test. Prolonged endurance is tested with a 2-hour test.

Agility

Agility is the ability to rapidly change direction and alter speed. This can be evaluated by timing the athlete as he or she negotiates an obstacle course. A zig-zag course using traffic pylons or saw-horses can be useful.

Balance

Balance is a combination of spatial awareness, proprioception, and coordination. Having the athlete walk on a 10 cm wide balance beam or even a plank on the floor can be useful. The athlete's ability to sustain a one-legged stork position can be timed to evaluate this function. Vestibulocerebellar and posterior column function is inter-related in this setting.

Other Tests

Various activities have been used successfully in other standardized tests such as the President's Council for Physical Fitness test or the Marine Corp Physical Fitness test. A vertical rope climb, softball throw, squat-thrust, or 8 count push-up, and peg-board climb have been used in the past. These have been partly abandoned because they can be difficult to adapt to large groups of athletes with a wide range of body types.

Clearance

The most important and complex aspect in the preparticipation

screening evaluation is deciding on an appropriate disposition for medical clearance. When considering medical clearance, five questions should be asked.

1. Does the problem place the athlete at increased risk of injury?
2. Is any other participant at risk of injury because of the problem?
3. Can the athlete safely participate with treatment (medication, rehabilitation, bracing, or padding)?
4. Can limited participation be allowed while treatment is being initiated?
5. If medical clearance is denied only for certain activities, in what activities can the athlete safely participate?

By using the new guidelines for participation and by answering these questions, the physician can make a reasonable assessment and decide upon medical clearance.^{5,20}

Some feel that hemoglobin/hematocrit, urine dipsticks, EKGs, and exercise stress tests are indicated or even mandatory for athletes. At this time, there is not sufficient evidence to include any of these tests as mandatory.

We use a simplified categorization of the athlete's readiness to participate.

1. Pass — This means that there are no reservations or limitations to the athlete's participation.
2. Pass with conditions — The athlete can begin participation but must seek further

Continuity of care can be a problem with mass screenings since the physician may not have prior knowledge of the athlete's medical conditions.

medicine ball throw can be useful because these tests consume little time.^{16,18} We have found that both tests correlate well with the explosive power needed in the interior line positions of a football team.¹⁷

In terms of sustaining motion, aerobic and anaerobic power can be evaluated. Aerobic power is the

evaluation of an identified problem; i.e. mild hypertension, cryptorchism, exercise-induced asthma, or suspicious cardiac murmurs.

3. Failure — This athlete cannot participate at all until the identified problem is addressed, i.e., severe hypertension is brought under control, splenomegaly is further evaluated, or loosened teeth are treated.

Legal Considerations

Bill of Rights jurists would have us believe that sports participation is an unalienable right. Certainly, the Title IX directives legislate equal sports opportunities. In reality, not all aspiring athletes are created equally. The modern variables in the disposition "equation" include our present litigious climate, interpretation of reasonable evaluation and care, and the desires of athletes, their parents, the coaches, and the schools. Obviously, physicians are concerned with the best interests of the athlete.

Currently, the most widespread interpretation of the statutes holds that the physician should not be held liable for untoward developments when the physician is not compensated directly for the pre-season examination. This does not remove the desire to strive for excellence and continually refine the preparticipation screening evaluation.

Administrative Concerns

In Georgia, the Quality Basic Education initiatives direct physicians to make a clearance decision without regard to the intended sport. For instance, clearing the repetitively concussed athlete for non-contact sports sounds reasonable, but is not allowed.

Records must be maintained by the individual's school. The school's accreditation process will

include a check on these records. Many athletes are in municipal or industrial recreation leagues where no one assumes this stewardship role. To answer these needs, we use a pressure sensitive, 3-layer clearance form. One copy is given to the athlete, one is given to the school, and one is filed by the IAHCRC. Over the years we have found that many athletes and a few schools have lost their forms, making ours the only surviving copy. We try each year to educate the schools about the importance of these seemingly trivial items. Most athletes, schools, leagues, and cities are becoming more aware of and sophisticated about these concerns and their liability potential.

The most widespread interpretation of the statute holds that the physician should not be held liable for untoward developments when the physician is not compensated directly for the preseason examination.

Conclusion

Of all the many facets of sports medicine, no aspect touches so many areas of specialty concern than the preparticipation screening evaluation. It is crucial that this evaluation take place because it can become the foundation on which future participation in a sports career is built. The philosophy of the medical clearance is to try to maintain the athlete's safe participation in sports, not to

search for disqualifying conditions. In the future, we will be able to develop sports-specific fitness testing and epidemiologic evaluations, as well as career tracking of these athletes in hopes of continuing the ideals of "citius, altius, fortius" from ancient time.

References

1. American Academy of Orthopaedic Surgeons. Athletic Training and Sports Medicine. AAOS, Park Ridge, IL, 1991. Chapter 5, The Preparticipation Physical Examination, pp. 49-64.
2. American Academy of Pediatrics. Recommendations for participation in competitive sports. *Physician Sportsmed* 1988;16(5):165-167.
3. American Academy of Pediatrics, Sports Medicine. Health Care for Young Athletes, 1983.
4. Committee on Sports Medicine, Pediatrics 1988;81(5):737-739.
5. AAFP, AAP, AOOASM, AOSSM, AMSSM. Monograph on Pre-participation Evaluation. (in publication)
6. Etchison B, Hunter SC. Performance measurement and percent body fat in the high school athlete. *Am J Sports Med* 1983;11:390-397.
7. Hunter SC, Etchison WC, Halpern BC. Standards and norms of fitness and flexibility in the high school athlete. *Athl Training* 1985;20:210-212.
8. Feinstein RA, Soileau EJ, Daniel WL. A national survey of preparticipation physical examination requirements. *Physician Sportsmed* 1988;16(5):51-59.
9. Garrick JG. Pre-participation sports assessment. *Pediatrics* 1980;66: 803-806.
10. Lombardo JA. Preparticipation evaluation. In: Sullivan JA, Grana WA, editors. *The Pediatric Athlete*. Park Ridge, IL:AAOS, 1988.
11. Roy S, Irvin R. Sports Medicine — Prevention, Evaluation, Management and Rehabilitation. Englewood Cliffs, NJ:Prentice-Hall, 1983.
12. Shaffer TE. Cardiac evaluation for participation in school sports, in Questions and answers. *JAMA* 1974;228:398.
13. Strong WB, Linder CW: Preparticipation health evaluation for competitive sports. *Pediatrics in Review* 1982;113-121.
14. Tennant FS, Sorenson K, Day CM. Benefits of pre-participation sports examinations. *J Fam Pract* 1981;13:287-288.
15. Harvey J. The preparticipation of the child athlete. *Clin Sports Med* 1982;1:353-369.
16. Amador JR, Henderson JM. Comparison of grip strength dynamometer and medicine ball put as measures of explosive strength and power (submitted to *Physician Sportsmed*).
17. Fowler RW, Henderson JM. Comparison of vertical jump and medicine ball throw as measures of power. (in progress)
18. Jacko JG, Henderson JM, Hunter SC: Profiles of All-Star Football Players. (submitted to *Med Sci Sports Exerc*).
19. Kraeger DR, Henderson JM, Matthews E. Evaluation of heart murmurs in high school athletes. (submitted to *Am Heart J*).
20. Magnes S, Henderson J. Common Disqualifying Conditions for Sports Participation. *Physician Sportsmed*, May 1992.

The Ageless Athlete

Stephen C. Hunter, MD

AGE IS NOT is not always a limiting factor for sports participation, as demonstrated by George Blanda and Nolan Ryan. Not all active professional football and baseball players are in their 40s, but many amateur and recreational athletes extend their "sports career" far beyond this age. This group provides an interesting challenge to the physician who manages their health care and treats their injuries.

Exactly what is an ageless athlete? Participation in any strenuous physical activity at any age is a form of athletics. Individual exercise programs, recreational sports, and competitive activities are all athletic endeavors. The level of participation is limited only by an individual's skill and ability. Health and age are secondary factors limiting an athlete's performance.

Obviously, health changes and age will affect an athlete's ability to continue performance at a certain level. It is important to allow the athlete patient to continue in sports at a safe level for their particular health and age limitations. The phy-

It is tantamount to first understand the older athlete who desires to remain active in sports. The astute physician should recognize this motivated "mindset" and realize s/he cannot take the easy way out by denying the patient continued participation in sports.

sician must gain the confidence of these "compulsive athletes" so their levels of activity can be maintained without frustration. It may be difficult to support the patient, but it may be disastrous to stop them!

Why? Most athletic people are driven by their compulsions, and these compulsions last throughout their life. Their general health and

well-being are maintained by satisfying these compulsions. Allow them to continue their sports activities and their mental outlook will be positive. Obviously, the fitness maintained by athletic activities is a known asset for good health.

Physicians cannot be cavalier in their approach to the athlete patient. The apparently healthy active patient must be carefully evaluated to determine any restrictions necessary in continued sports participation. Educating the patient of the need for this approach is critical. Continued monitoring in the future will then become automatic.

Health and Sports

Twelve percent of the U.S. population is over the age of 65, and 80% of these people have at least one chronic medical condition. Sixty percent of those with these medical problems still pursue active sports and recreational activities.

The benefits of regular exercise in the ageless athlete include less physical disability, maintenance of more functional capacity, the requirement of less medical care, bet-

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ter cardiovascular fitness, lower body weight, and a lower rate of developing musculoskeletal disability. Of the four most common chronic medical conditions seen in the elderly — arthritis, high blood pressure, heart disease, and hearing loss — only hearing loss fails to improve with exercise.

Of the four most common chronic medical conditions seen in the elderly — arthritis, high blood pressure, heart disease, and hearing loss — only hearing loss fails to improve with exercise.

What are the basic criteria for monitoring and counseling the ageless athlete? Cardiovascular function is probably the most critical factor. Knowing the athlete patient's history, performing standard screening, including EKG and stress testing, provides the baseline for guiding them in their continued sports activities. If there are no cardiovascular abnormalities, the patient can exercise within a range that is 65% to 75% of their maximum heart rate (220 minus the patient's age). This range gives the patient an acceptable heart rate to maintain, but not exceed, during their sports activities. In this safe range, the participant should be able to carry on a speaking conversation while performing their activities.

Cardiovascular deficiencies obviously alter the athlete patient's ability to perform within the 65% to 75% range. A "customized" program will still allow that person

sportive activities.

Arthritis obviously decreases functional ability. Medical awareness of an arthritic condition can lead to alterations in activities that will allow continued participation without risk of increased injury to the joints. Conservative and surgical treatment may improve arthritis problems and aid the patient in continuing their sports career.

The physician should be aware that increasing age itself is associated with a myriad of conditions that possess the potential to thwart fitness activities. These include decreasing strength and flexibility, lessened bone strength, lowered breathing capacity, poorer vision, more difficulty regulating body temperature, and a tendency toward weight gain due to decreasing metabolic needs. These irreversible changes may vary among individuals, but should be monitored by the physician. Appropriate alternative activities should be recommended as the ageless athlete matures.

The ageless athlete has a different pattern of injuries associated with their activities. Less fractures, dislocations, contusions, and sprains are seen in this group. Instead, they have a myriad of degenerative, inflammatory, and attritional injuries. More of their injuries occur in the shoulder, foot, and toe, and less in the knee and ankle as compared to their younger counterparts. Most of these injuries occur in the sports of tennis, biking, walking, and golf; but these also are the most common activities for the ageless athlete.

Prevention is the best approach to these types of injuries. Awareness of pre-existing health problems can lead to alternative activities. Many musculoskeletal injuries can be averted by proper warm-up and flexibility programs. A daily routine for flexibility is important. The patient should have a system-

atic approach of stretching the upper and lower extremities and trunk before and after exercise sessions. Any patient who is initiating an exercise program or attempting to increase their level of activities should be counseled on a graduated approach to prevent "stress fatigue" injuries.

When these typical injuries occur, rest is probably the most critical factor in treatment. Routine modalities, including heat and cold, medication, and splinting are helpful. It is important to keep the athlete patient as active as possible despite their injury. This will help maintain their overall health and promote a "positive attitude" for recovery and return to activities.

It is tantamount to first understand the older athlete who desires to remain active in sports. Their motivation may stem from a lifelong

Many musculoskeletal injuries can be averted by proper warm-up and flexibility programs. A daily routine for flexibility is important.

participation in competitive sports or they may have realized that their conditioning for sports competition benefits their health or alleviates their injury problems.

The astute physician should recognize this motivated "mind-set" and realize they cannot take the easy way out by denying the patient continued participation in sports. A treatment compromise should be developed that will allow the patient to return to some sports activities after their health problems have been treated. Not all physicians will adhere to this philosophy, and the ageless athlete will seek out the physicians that do.

The Female as a Sports Participant

Letha Y. Griffin, MD, PhD

WOMEN ARE participating in athletics, both recreationally and competitively, in increasing numbers each year. They often seek aid from their physicians for the treatment of their injuries or for suggestions regarding conditioning programs. In order to properly advise these athletes, one must remember that there are certain biological and anatomical differences between the sexes which contribute to the uniqueness of each sex as an athlete.

Women have smaller bones and less articular surface. Males have longer legs, being 56% of their height as compared to 51.2% in the female. The heavier, larger, more rugged structure of the male gives him a mechanical and structural advantage in athletic activities. His longer bones act as greater levers, producing more force in sports requiring striking, hitting, or kicking.

Females have narrower shoulders, wider pelvises, and greater valgus of their knees than males. The greater varus of the hip and valgus of the knee have been blamed by some for the increased

A discussion of the anatomic and physiologic differences between males and females that influence their athletic abilities.

number of overuse syndromes seen about the hip and knee in the female athlete, especially in the unconditioned state. Because of her wider pelvis and shorter lower extremities, the female has a lower center of gravity than the male, being only 56.1% of her height compared to 56.7% in the male. This gives the female a distinct advantage in balance sports such as gymnastics. The male must widen his stance to obtain the same degree of balance as the female. Hence, events like the balance beam, one of the four main events of women's gymnastic competition, is not even

included in male gymnastic routines.

For the same body weight, females have smaller heart sizes, lower diastolic and systolic blood pressures, and smaller lungs and thoracic cavities than equally trained male athletes. This decreases their effectiveness in both anaerobic(burst) and aerobic(endurance) activity. Maximal oxygen consumption(termed VO₂ max) reflects the body's ability to maximally extract and utilize oxygen for aerobic metabolism. One's VO₂ max measures the lungs' ability to extract oxygen, the heart's ability to deliver oxygen to the muscles, and the muscles' ability to maximally assimilate oxygen in energy pathways. Because of her smaller heart size, stroke volume, and lung tissue mass, a female given the same weight and conditioned state as a male will have a lower VO₂ max.

The female is also at an athletic disadvantage when compared to an equally trained male in that she has less muscle mass, but greater fat per body weight. Be-

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cause of her smaller muscle mass, the female cannot achieve the same power or speed as her male counterpart. The female's increased percent of body fat per body weight is still a disadvantage, even if you match a male of equal muscle mass, since the female's muscle mass will have to "energize" her extra body fat. If the male is made to perform in a weighted vest, the weight being equal to the excess body fat of the female, his VO₂ max is lowered to her range.

Evidence has demonstrated that in equally trained, conditioned athletes, males and females were equal in thermal regulation.

Even though excess body fat increases energy demands and decreases the amount of total body weight available for muscle mass, it does serve as a ready source of calories. In fact, some argue that in some very long distance events such as marathons, ultramarathons, and long distance swimming competitions, females will surpass males as they may be able to better convert to fatty acid metabolism when glycogen stores are depleted. Fat also insulates — an advantage for women Channel swimmers. In 1978, Penny Dean set the record for the fastest one-way crossing: 7 hours, 40 minutes.

It used to be thought that females were more prone to heat exhaustion than males and needed higher core body temperatures before increasing their sudorific response. However, evidence has demonstrated that in equally trained, conditioned athletes, males and females were equal in thermal regulation.

Basal metabolic rate is lower in females, and therefore, for the same amount of activity as the male, they need fewer calories. This is an important fact to keep in mind when planning training table meals or pregame meals for women athletes.

Coordination and dexterity are difficult to measure, but both seem to be shared equally between the sexes.

In summary, males exceed females in power and speed, whereas females excel in balance sports. Because of the metabolic differences, the male has an edge with anaerobic events and short aerobic endurance activities. The female's capacity for fatty acid metabolism may give her an advantage in very long distance endurance events. Both sexes probably share equally neuromuscular coordination.

These comparisons are made between hormonally mature males and females. The prepubertal time for the female is when she best approximates her male counterpart in strength, aerobic power, oxygen pulse, heart size, and height. Puberty in the male is a time of maturation of fitness, but in the female it is a period of great alteration of physical characteristics and abilities, making her no longer equal to her male counterpart in size or strength. The female must adjust timing and performance techniques to accommodate her new increases in height and weight without the help of a parallel increase in muscle mass.

Injury Rates and Conditioning

Authorities prior to the 1970s blocked women's participation in long distance running events because they felt the female was not physically strong enough to sustain such an activity and would ultimately

do herself physical harm. The performance of the first woman to run the 800 meter race only served to reinforce this idea. The majority of participants, untrained and uncoached, tried to sprint the entire distance, causing many to collapse along the way.

Lack of conditioning may also be responsible for early reports demonstrating greater numbers of injuries in female athletes when compared to males. Similarly, studies of the first female cadets admitted to the military academies found females to have an increase in minor injuries and a greater time loss from duty.

The early conclusion from these studies, unfairly drawn, was that females were physiologically inferior to males. In reality, these studies merely reflected that females entering the military academy were not as well-conditioned as male cadets.

From these injury surveys, it is evident that conditioning programs, including properly structured weight training programs, are

Basal metabolic rate is lower in females, and therefore, for the same amount of activity as the male, they need fewer calories. This is important when planning training or pregame meals.

as important for female athletes as they are for males. Weight training will not produce muscle-bound females, a frequently rumored myth. A woman can increase her strength by 44% without any significant increase in muscle mass. Muscle size is a hormonally regulated characteristic. Conditioning increases endurance, strength, and flexibility,

and therefore decreases the number of injuries.

As better conditioning programs have been instituted for our women athletes, injury rates have de-

Conditioning programs, including properly structured weight training programs, are as important for female athletes as they are for males.

creased. In fact, recent reported injury surveys have demonstrated a greater difference in the numbers

and types of injuries between females in different sports than between males and females in the same sport.

Summary

The physician caring for the female athlete must be aware of the anatomic and physiologic differences between the sexes. Not only do these differences impact on sport participation, but they can also affect the types of injuries seen in women athletes. However, just as in male athletes, adequate conditioning improves performance and reduces the risk of injury, and thus, is an essential component of sport participation.

Bibliography

1. Albohm M. How injuries occur in girls' sports.

Physician Sports Med 1976;4(2):46-49.

2. Clarke K, Buckley W. Women's injuries in collegiate sports. Am J Sports Med 1980;8(3):187-191.

3. DeHaven K, Lintner D. Athletic injuries: comparison by age, sport, and gender. Am J Sports Med 1986;14(3):218-224.

4. Eisenberg I, Allen W. Injuries in a women's varsity athletic program. Physician Sportsmed 1978;6(3):112-120.

5. Kosek S. Nature and incidence of traumatic injury to women in sports. Proceedings of the National Sports Safety Congress, Cincinnati, 1973;50-53.

6. Protzman R. Physiologic performance of women compared to men. Am J Sports Med 1979;7:191-194.

7. Puhl J, Brown C, Voy R (eds). Sport Science Perspectives for Women: Proceedings from the Women and Sports Science Conference. Champaign: Human Kinetics, 1988.

8. Shangold M, Mirkin G (eds). Women and Exercise: Physiology and Sports Medicine. Philadelphia: F.A. Davis, 1988.

9. Wells C. Women, Sport, and Performance: A Physiological Perspective. Champaign: Human Kinetics, 1985.

10. Whiteside P. Men's and women's injuries in comparable sports. Physician Sports Med 1980;8(3):130-140.

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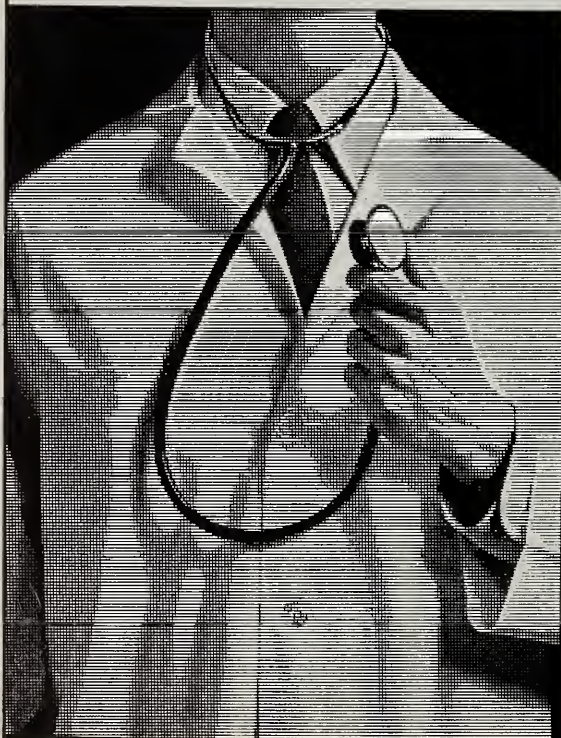
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Shoulder Function and Dysfunction in the Baseball Pitcher

Joseph B. Chandler, MD

Introduction

THE SHOULDER is a uniquely constructed joint which allows greater mobility than any other joint in the body. Such mobility is critical in most athletic activities, especially racquet and throwing sports. The baseball pitcher places stresses on the shoulder unlike any other athlete, demonstrating its optimal function, and unfortunately, its propensity to dysfunction.

Pitching is a complex activity which involves a sequence of body movements that result in the rapid propulsion of the baseball. Four primary parameters determine the effectiveness of a pitcher. These are the ability to generate velocity, maintain accuracy, apply spin, and sustain endurance. The effective pitcher requires performance at a level that maximally stresses the anatomic elements involved. The shoulder, during the act of throwing a baseball, demonstrates a delicate balance between mobility and stability. The fine line that separates maximum performance and injury is often crossed, making shoulder injuries all too common.

The majority of shoulder injuries in the baseball pitcher involve disruption of the delicate balance between the rotator cuff, the static stabilizers, and the other scapular muscles.

The rotator cuff, the static stabilizers, and the other scapular muscles work together to optimize the delicate balance between stability and function. The vast majority of shoulder injuries in the baseball pitcher involve disruption of this delicate balance.

The Biomechanics of Pitching

The forces generated and energies used in pitching are much larger than those that could be generated by the shoulder musculature alone.

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They differ quantitatively rather than qualitatively from the biomechanics of the shoulder in the activities of daily living. The focus is on the higher energies involved in the throwing motion, which accounts for many injuries seen.

The act of throwing consists of five phases: 1) wind up; 2) early cocking; 3) late cocking; 4) acceleration (including release of the ball); and 5) follow-through and deceleration. The thrower uses body weight and large muscles to generate kinetic energy, which is guided across the shoulder in the direction of the ball. After the ball is released, the retained energy within the throwing arm is released by reversing this process, energy being dissipated by the larger muscles of the lower limb and back. In general, pathology occurs in one of two ways: 1) improper mechanics generating the necessary throwing speed requires more shoulder muscle force to propel the object, leading to fatigue; and 2) improper dissipation of energy in acceleration results in the retention of unwanted energy within the soft tissues about

the shoulder, resulting in tissue damage.

Common Shoulder Injuries

Injuries to the pitcher's shoulder may be acute, subacute, or chronic. Acute injuries, largely consisting of soft tissue injuries, are relatively uncommon. These would include acute strains or sprains of varying degrees to the rotator cuff or scapular stabilizers. Subacute or chronic injuries to the throwing shoulder are much more common. These include overuse syndromes of the muscular stabilizers about the shoulder, tears of the superior glenoid labrum (S.L.A.P. lesions), various degrees of impingement syndrome, as well as instability of the shoulder.

Over the past few years, most emphasis has centered on impingement syndrome and instability, and the relationship between the two. In the past, variations of impingement syndrome were the most common diagnosis in the painful pitcher's shoulder. The mechanism of injury in impingement syndrome involves compression and abrasion

Diagnostic imaging studies including MRI scanning and arthrography with or without CT scanning are helpful, but care must be taken not to place excessive emphasis on these studies.

of the subacromial structures (including the rotator cuff, subacromial bursa, and biceps tendon) between the acromion, the coracoacromial ligament, and the humeral head. This process of impingement may lead to a variety of

problems ranging from subacromial bursitis, bicipital tendinitis, rotator cuff tendinitis, to partial and even full thickness tears of the rotator cuff. It is now thought this group of "primary impingers" is relatively small, with the vast majority of impingement problems now being attributed to various degrees of instability.

Instability in the pitcher's shoulder is now given primary emphasis. The scapular stabilizers (i.e., the trapezius, rhomboids, and serratus anterior) place the glenoid in the optimal position for pitching; the rotator cuff muscles center the humeral head in the most stable position in the glenoid while providing maximal leverage; and the ligamentous labral-capsular complex, especially the inferior glenohumeral ligament, provides the static stability of the joint. Overuse with pitching may stretch or injure the static stabilizers. This laxity, in turn, disrupts the synchronous firing of the scapular stabilizers and rotator cuff muscles. The latter must now attempt to contain the humeral head on their own. Injury leads to asynchrony, which contributes to additional injury and damage to both the static and muscular stabilizers, thus worsening instability. When the arm is now in the abducted and externally rotated position and the humeral head subluxes anteriorly, impingement occurs. These impingement problems are therefore secondary to the instability.

Other more unusual problems can occur in the pitcher's shoulder, and these deserve brief mention. They include posterior instability, injuries of the acromioclavicular joint, neurological syndromes (including quadrilateral space syndrome and suprascapular nerve entrapment), and vascular problems (including axillary artery compression and axillary vein thrombosis).

Diagnosis and Treatment

A careful history and thorough

physical examination will properly diagnose the pitcher's painful shoulder in the majority of cases. The "relocation test" of Jobe is especially helpful in differentiating impingement from instability. Diag-

Conservative care is almost always appropriate in the treatment of the injured pitcher's shoulder....With rare exception, surgical intervention is reserved for those who fail to respond to this care.

nostic imaging studies including MRI scanning and arthrography with or without CT scanning are helpful, but care must be taken not to place excessive emphasis on these studies. MRI scans of the competitive pitcher's shoulder (especially at the professional level) are rarely normal. It is frequently difficult to differentiate rotator cuff tendinitis from partial thickness cuff tearing on the basis of MRI scanning. These and other abnormal findings must be interpreted in the context of the history and physical exam.

Findings of instability on these studies may be extremely subtle or often absent. Occasionally, attenuation of the capsule and associated glenohumeral ligaments is seen, or attachment of the capsule in the more medial location on the glenoid neck will be noted. Frank tears of the anterior, inferior labrum, or classic Bankhart lesions, are rarely seen in pitcher's with instability. Superior labral tears, so called S.L.A.P. lesions, may cause mechanical symptoms in the pitcher's shoulder, with or without associated instability. Superior labral

tears of the S.L.A.P. variety are frequently small and not well visualized with these imaging studies, either MRI or arthrography-CT scanning.

Occasionally arthroscopy is necessary on a purely diagnostic basis in the pitcher's shoulder; however, recovery time after a purely diagnostic arthroscopy in the competitive throwing athlete is prolonged (i.e. usually 3 months at least) compared to diagnostic arthroscopy of other joints.

Conservative care is almost always appropriate in the treatment of the injured pitcher's shoulder. This consists of rest, non-steroidal anti-inflammatory agents, ice/heat and other symptomatic modalities, a comprehensive stretching and strengthening program for the rotator cuff and scapular stabilizers, the judicious and occasional use of steroid injections, and a carefully monitored and planned, progressive throwing program. Such a program is successful in returning a very high percentage of pitchers back to their previous level of competition.

With rare exception, surgical intervention is reserved for those pitchers who have failed to respond to a comprehensive and prolonged (usually at least 3 months) conservative treatment program. Surgical arthroscopy is useful in cases of significant superior labral tears (S.L.A.P. lesions), and pitchers with severe recalcitrant impingement with minimal or no instability. As with MRI scans in the pitcher's shoulder, arthroscopic abnormalities, especially in the professional pitcher, are commonly seen and frequently asymptomatic.

Care must be taken not to overtreat these lesions, since overzealous treatment of labral pathology and subacromial structures may accentuate underlying mild instability. Likewise, overaggressive debridement of partial thickness tears of the rotator cuff may accelerate degeneration and subsequently lead to full thickness tearing.

While most pitchers with instability can be treated successfully with an aggressive rehabilitation program, surgery is occasionally necessary. Controversy exists regarding the choice of surgical procedures, arthroscopic or open reconstruction. Currently the procedure of choice in the highly competitive pitcher with instability which has failed a rehabilitation program

Defining the role of instability has greatly advanced diagnosis and treatment of the pitcher's painful shoulder. With this knowledge, the greatest emphasis is now placed on prevention.

(lasting at least 3 to 6 months) appears to be the open capsulo-labral reconstruction as described by Jobe. Though early results are somewhat promising, the long-term results of returning pitchers to a highly competitive level is still uncertain.

In any surgical procedure for a pitcher's shoulder, the post-opera-

tive rehabilitation is as important, if not more so, than the surgical procedure itself, and a return to throwing must be patiently and carefully monitored.

Conclusion

Major advances have been made in understanding the mechanics of baseball pitching which have helped to delineate the cause of shoulder injuries in the pitcher. Defining the role of instability has greatly advanced diagnosis and treatment of the pitcher's painful shoulder. With this knowledge, greatest emphasis is now appropriately placed on prevention in the form of off-season conditioning and in-season maintenance programs designed to maintain maximum strength of the rotator cuff and scapular stabilizers, which in turn helps maintain optimal shoulder stability. Hopefully, such programs will lead to decreased injury rates, improved performance, and even, perhaps, prolonged careers.

Suggested Reading

1. DiGiovine NM, Jobe FW, Pink M, Perry J. An electromyographic analysis of the upper extremity in pitching. *J Shoulder Elbow Surg* 1992;1:15-26.
2. Glousman RE, Jobe FW, Tibone JE, et al. Dynamic EMG analysis of the throwing shoulder with glenohumeral instability. *JBJS* 1988;70A: 220-226.
3. Jobe FW. Impingement problems in the athlete. AAOS instruction course lectures. Chapter 15; 205-209, 1988.
4. Jobe FW, Tibone JE, Jobe CM, Kvitne RS. The shoulder in sports. In, *The Shoulder*. Rockwood and Matsen (eds). pp. 961-990. WB Saunders Co. 1990.
5. Jobe FW. Anterior capsulolabral reconstruction of the shoulder in athletes in overhand sports. *Am J Sports Med* 1991;19(5):428-434.
6. Tibone JE, Elrod B, Jobe FW, et al. Surgical treatment of tears of the rotator cuff in athletes. *JBJS* 1986;68A:887-891.
7. Zarins B, Andrews JR, Carson WG (eds). *Injuries to the throwing arm*. Based on proceedings of the National Conferences sponsored by the U.S.O.C. Sports Medicine Council. WB Saunders Co., 1985.



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Ligamentous Injuries to the Lateral Aspect of the Ankle: The Ankle Sprain

Robert L. Brand, MD

INJURIES to the lateral ligaments of the ankle — the ankle sprain — continue to represent the most frequent significant joint injury in athletics.¹ The great majority of these can be treated quite satisfactorily with non-operative means. Frequently, rather rapid return to competition is possible. A small minority, however, are most appropriately treated by operative intervention.

By using the history, appropriate physical examination, and necessary confirmatory tests, the physician can select the most appropriate treatment for the athlete with the injured ankle.

Anatomy

A clear understanding of the anatomy of the lateral side of the ankle is necessary to appropriately evaluate these injuries. The ankle is a hinged joint, formed by the distal tibia with its projection the medial malleolus and the lateral malleolus containing the talus. The distal tibia and fibula are connected by the very dense tibiofibular ligament. This ligament is rarely disrupted

By using the history, physical examination, and necessary confirmatory tests, the physician can select the most appropriate treatment for the athlete with the injured ankle.

without a fracture, and this is unusual in athletics. The anterior talofibular ligament and the fibulocalcaneal ligament provide the primary restraints to excessive motion of the ankle. These two ligaments are the ones that are injured in the usual ankle sprain. The anterior talofibular ligament runs from the anterior margin of the lateral malleolus obliquely to a point on the lateral neck of the talus. The fibulocalcaneal attaches at the tip

of the lateral malleolus, courses behind the peroneal tendons to attach on to the calcaneus. It usually has a slightly posterior angulation (Figure 1).

Diagnosis

The usual means of arriving at a diagnosis, focused history, focused examination, and confirmatory tests, are used. An inversion injury is necessary to produce damage to the lateral ligaments of the ankle. Most commonly in sports, this occurs coming down from a jump often landing on another player's foot, and sustaining the inversion injury. The athlete frequently has a feeling, or hears a "pop." With all but the mildest injury, s/he will be unable to continue to participate.

It is important to inquire if there has been a history of frequent ankle sprains. If the athlete has a functionally unstable ankle, i.e., one that is frequently injured or sprained with minimal provocation, this will affect our treatment recommendations.

Examination includes observing for the areas of swelling and palpat-

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ing the areas of maximum tenderness. Early, this will be over the area of the torn ligaments. Later, the swelling will be more diffuse which may confuse these findings. After a few days ecchymosis will develop which may reach the toes.

It is important to test for laxity of the ligaments. The integrity of the anterior talofibular ligament is tested by allowing the patient to dangle the lower leg off the examining table and having all the muscles relaxed so that the foot is hanging limply. Posterior pressure is applied to the tibia and anterior pressure is applied to the heel. If the anterior talofibular ligament is significantly damaged, the examiner can feel the talus roll forward subluxing out of the ankle joint. The fibulocalcaneal ligament is tested by applying lateral pressure to the distal tibia just above the medial malleolus and attempting to invert the foot by applying pressure to the heel on the lateral aspect. Again, the foot should be in a relaxed, equinus position for this test to be correctly performed. Also, the examiner must do these tests in a gentle manner to avoid producing significant spasm which reduces the reliability of the tests.

Routine radiographs should be taken to exclude fractures. Osteochondral fractures of the talar dome should be looked for. If one suspects a double ligament injury, i.e., an injury to the anterior talofibular and the fibulocalcaneal ligaments, either a stress radiograph, an arthrogram of the ankle joint, or peroneal sheath arthrography should be performed. The stress radiograph is used in my practice. It may be necessary to use local anesthesia or a peroneal nerve block to obtain an adequate examination. It is important for the foot to be in an equinus position and for the patient to relax so that an adequate examination may be performed. The stress is applied as noted above for examination of the fibulocalcaneal

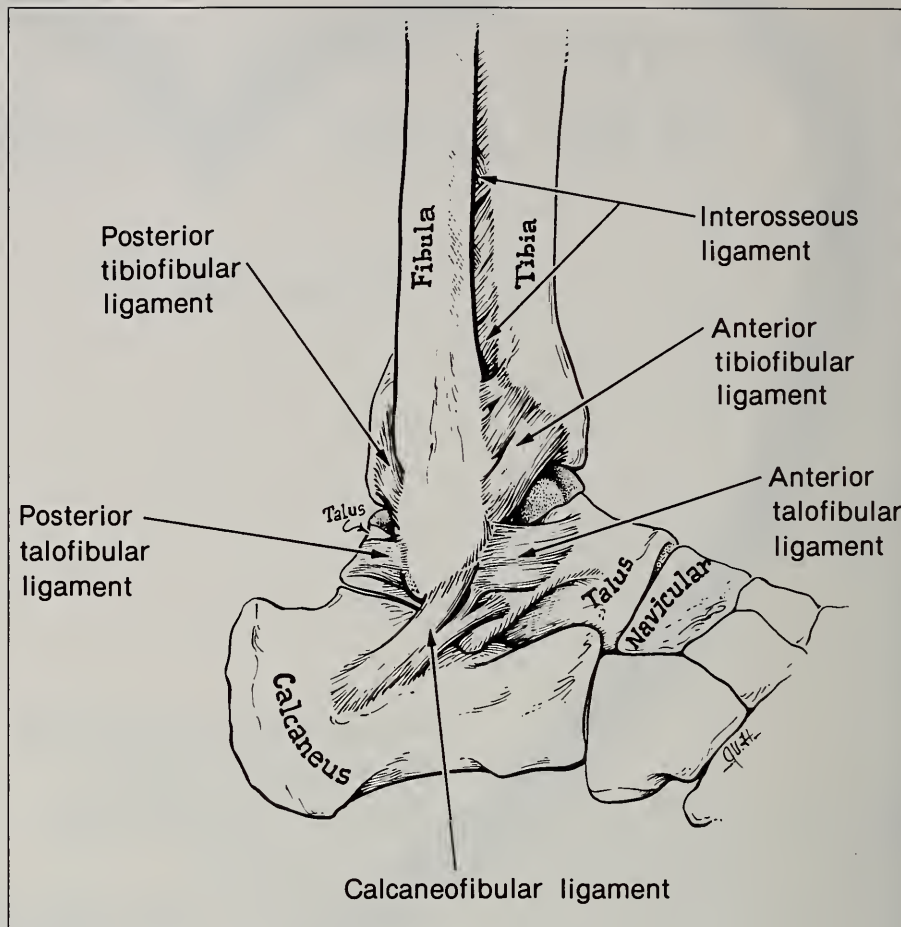


Figure 1 — Anatomy of the Lateral Aspect of Ankle.

ligament and a radiograph is performed as this is being done.

Treatment

Management of the vast majority of these lateral ankle ligament injuries is by nonoperative means. A number of reports have shown that functional treatment is superior to cast immobilization for all ankle sprains treated nonoperatively.²⁻⁵ This functional treatment has classically included tape immobilization and elastic wrap.

Recently, the use of padded plastic support devices typified by an air-stirrup (Aircast Inc., Summitt, NJ) has aided in this regard. It has been my experience that tape support with the foot in the right angle position has been the most satisfactory means of functional management of ankle sprains. All methods include the early use of ice over the

affected area and elevation.

Nonsteroidal anti-inflammatory drugs are frequently used. Further, I have found that putting the foot in a plantar grade or walking position and allowing weight bearing to tolerance early has led to the most rapid return to a functional status.² It is for this reason that I favor tape and/or the air cast as opposed to the use of elastic wrap.

The use of casting, while it leads to a stable ankle, and therefore, a good result, produces somewhat more stiffness early on and delays the return to a functional status and participation in sports activities. The studies cited above show no significant increase in the number of ankles which end up with functional stability using cast treatment as opposed to elastic wrap, tape, or an air cast.

In a very few ankles, I recom-

mend surgical repair as the most effective treatment. Firstly, this is recommended in an individual who has a functionally unstable ankle with a history of frequent sprains. Secondly, in those individuals who have a small bony avulsion at the tip of the lateral malleolus which we know contains the end of the ligament.⁶ A higher percentage of these individuals end up with so called "weak ankle" syndrome. This can be eliminated by surgical repair. Lastly, surgery is recommended in those individuals who have gross instability and talar tilts over 25 degrees. Again, a high percentage of these athletes end up with functionally unstable ankles. When surgery for lateral ankle ligaments is performed using these criteria, over 95% have stable ankles that are asymptomatic.⁶

If the athlete has a functionally unstable ankle, i.e., one that is frequently injured or sprained with minimal provocation, this will affect our treatment recommendations.

Rehabilitation

Using the functional method of treatment, rehabilitation begins when treatment is initiated. Weight bearing is used from the outset. If possible, the ankle should be re-taped daily by a coach or trainer and the athlete encouraged to progress to walking without a limp and then to jogging without a limp. Where this daily retaping is not available, patients are encouraged to progress as they can, but it has been our experience that they progress somewhat more slowly. The ankle is supported 24 hours a day until the athlete is jogging without a limp.

Currently, almost all athletes are placed in an air cast by the end of the first week. They use this support device continually for 3 weeks and for sports for the remainder of the season or for a minimum of 8 weeks. At the end of the first week, heel cord stretching is begun. Eversion against resistance or peroneal exercises are used beginning between the second and third week. As soon as the athlete can sprint full-speed and perform a hop off the injured foot, while his ankle is supported, he is allowed to return to participation but with support.

Athletes who undergo surgical repair begin the later stages of this rehabilitation when the cast is removed, usually at 4 weeks postoperatively.

Prevention

Studies have shown that individuals with tight heel cords are somewhat more susceptible to ankle sprains than those with looser cords.⁷ Therefore, we recommend heel cord stretching to all those who participate in athletic events. This would appear to be especially important in those sports that are jumping sports.

In the last several years, lace up canvas ankle supports have become available. These offer a significant degree of protection to participants. The most popular are the Cramer and the Swed-O. We strongly recommend that athletes in team sports use these protective devices. It has also been shown that the use of the high top shoe when properly laced to the top offers some degree of protection.

Summary

Good protective devices are available which will prevent or reduce the severity of ankle sprains. If an injury to the lateral ligaments of the ankle — an ankle sprain — is sustained, functional treatment with early tape support, followed by a plastic support device will return the vast majority of the injured athletes to competition rapidly and

with a stable ankle. In a few cases, surgical repair is the most appropriate treatment to return the individual to his chosen endeavor with a stable ankle.

The use of casting, while it leads to a stable ankle, produces somewhat more stiffness early on and delays the return to a functional status and participation in sports activities.

References

1. Blyth CS, Mueller FO. When and where players get hurt. *Physician Sportsmed* 1974;9:45-52.
2. Brostrom L. Sprained ankles. V. Treatment and prognosis in recent ligament ruptures. *Acta Chir Scand* 1966;132:537-550.
3. Cox JS, Brand RL. Evaluation and treatment of lateral ankle sprains. *Physician Sportsmed* 1977;5:51-55.
4. Dettori JR, Basmania CJ. Personal Communication.
5. Freeman MAR. Treatment of ruptures of the lateral ligament of the ankle. *J Bone Joint Surg* 1965;47B:661-668.
6. Brand RL, Collins M, Templeton T. Surgical repair of ruptured lateral ankle ligaments. *Am J Sports Med* 1981; 9:40-44.
7. McCluskey GM, Blackburn TA, Lewis T. A treatment for ankle sprains. *Am J Sports Med* 1976;4:158-161.

Suggested Reading

1. Almquist G. The pathomechanics and diagnosis of inversion injuries to the lateral ligaments of the ankle. *J Sports Med* 1974;2:109.
2. Black HM, Brand RL, Eichelberger M. An improved technique for the evaluation of ligamentous injury in severe ankle sprains. *Am J Sports Med* 1978;6:276-282.
3. Brostrom L. Sprained ankles. I. Anatomic lesions in recent sprains. *Acta Chir Scand* 1964;128:483-495.
4. Brostrom L. Sprained ankles. VI. Surgical treatment of "chronic" ligament ruptures. *Acta Chir Scand* 1966;132:551-565.
5. Freeman MAR. Instability of the foot after injuries to the lateral ligaments of the ankle. *J Bone Joint Surg* 1965;47B:669-685.
6. Ruth CJ. The surgical treatment of injuries of the fibular collateral ligaments of the ankle. *J Bone Joint Surg* 1961;43A:229-239.
7. Staples OS. Result study of ruptures of lateral ligaments of the ankle. *Clin Orthop* 1972;85:50-58.
8. Staples OS. Ruptures of the fibular collateral ligaments of the ankle. *J Bone Joint Surg* 1975;57A:101.

The American Medical Association, CLIA and You

The federal government has released long-awaited rules to implement the Clinical Laboratory Improvement Act of 1988. The law expands the extent of federal laboratory regulation from the 13,000 labs now regulated to an estimated 200,000.

The bottom line, and the most encouraging news, is that physicians performing in-office tests will be able to continue with current personnel. But, standards will be most stringent for labs doing the most complicated tests.

In response to comments by the AMA and other physician groups, the test categories were changed to more accurately reflect how physicians use tests in caring for patients. Rules governing personnel were modified to allow doctors with one or two years of training or experience to head their own labs. Other personnel rules should be phased in over five years to provide help in rural areas.

The rules were published February 28 in the *Federal Register*. The AMA will work with specialty and state medical societies to modify parts of the rules that still need revision. Early analysis shows that problems remain. For example, it's not clear what kind of experience physicians are required to have to head an office lab. Regulations requiring routine unannounced inspections are apt to disrupt patient care. HCFA's estimate that additional costs will only add 25 cents per test is in question.

Regulations won't be effective until September and then will be phased in over several years to give physicians time to learn and comply. The AMA, working with other medical groups, has

already begun to put together educational programs and materials.

Here are the CLIA implementation timetables:

September 1, 1992: Quality standards go into effect. Labs will have to adhere to manufacturers' current instructions, and meet other specific interim quality control requirements. Also, a complete list of lab tests will be published. Enforcement regulations will go into effect.

January 1, 1994: Newly regulated labs, including most physician office labs, must be enrolled in a proficiency testing program.

In most office labs, the physician would serve as the clinical consultant—liaison between the lab and its clients for the purpose of interpreting and reporting test results. Physicians may also serve as technical consultants—the one responsible for technical and scientific oversight of the lab. Between September 1, 1992 and January 1, 1994, test manufacturers should be revising instructions to make them consistent with CLIA requirements and be approved by the FDA.

For now, wait. In the next few months, the government will begin to tell physicians what regulatory category they are going to fall into, how to register and how much to pay.

AMA executive Vice President, James S. Todd, MD said physicians should be "encouraged, but not complacent" about the regulations. "We are cautiously hopeful that these rules can be implemented with the minimal physician impact. But they will clearly have an impact on their offices," Dr Todd said.

Anterolateral Impingement of the Ankle

Kurt E. Jacobson, MD, Stephen H. Liu, MD

Introduction

AN SPRAINS are the most common injury in sports. Frequently, the lateral ligament complex, specifically the anterior talofibular ligament, is injured. Most ankle sprains continue to be treated nonoperatively, and most will heal without sequelae after conservative treatment. However, a recent study of young basketball players who had conservative treatment after multiple ankle sprains found that over half of these players had residual problems.¹ Because most ankle sprains involve injuries of the lateral ligamentous complex, chronic lateral ankle pain after ankle sprains is common.

Anterolateral impingement syndrome is a frequent cause of chronic lateral ankle pain and disability after multiple lateral ankle sprains. The impingement process usually occurs after a pattern of repeated sprains in which ankle motion has caused continual inflammation of the healing ligaments, resulting in chronic synovitis and formation of scar tissue. With time, synovial hypertrophy and impinge-

The impingement process usually occurs after a pattern of repeated sprains in which ankle motion has caused continual inflammation of the healing ligaments, resulting in chronic synovitis and formation of scar tissue.

ment of this tissue between the talus, tibia, and fibula may cause increased irritation, pain, synovitis, and an increase in scar tissue formation.

Anatomy

The borders of the lateral gutter include the talus medially, the fibula laterally, and the tibia with the

tibiofibular ligament superiorly. Anteriorly, the lateral gutter is bordered by the anterior talofibular, calcaneofibular, and the anterior tibiofibular ligaments (Figure 1). Posteriorly, the border includes the posterior talofibular, calcaneofibular, and posterior tibiofibular ligaments (Figure 2).

Clinical Presentation

The patient commonly presents with a history of multiple ankle sprains followed by chronic persistent ankle pain with ambulation, ankle weakness, and frequently a sensation of giving way. Chronic ankle pain can also occur when the patient has a history of previous surgeries on the ankle.

Physical examination usually elicits localized tenderness at the anterolateral gutter of the ankle. Range of motion of the ankle is usually normal as far as plantar flexion is concerned, but dorsiflexion is limited because of the impingement. Excessive foot pronation, pes planus, and posterior tibialis tendinitis may aggravate the impingement. Patients usually do not have

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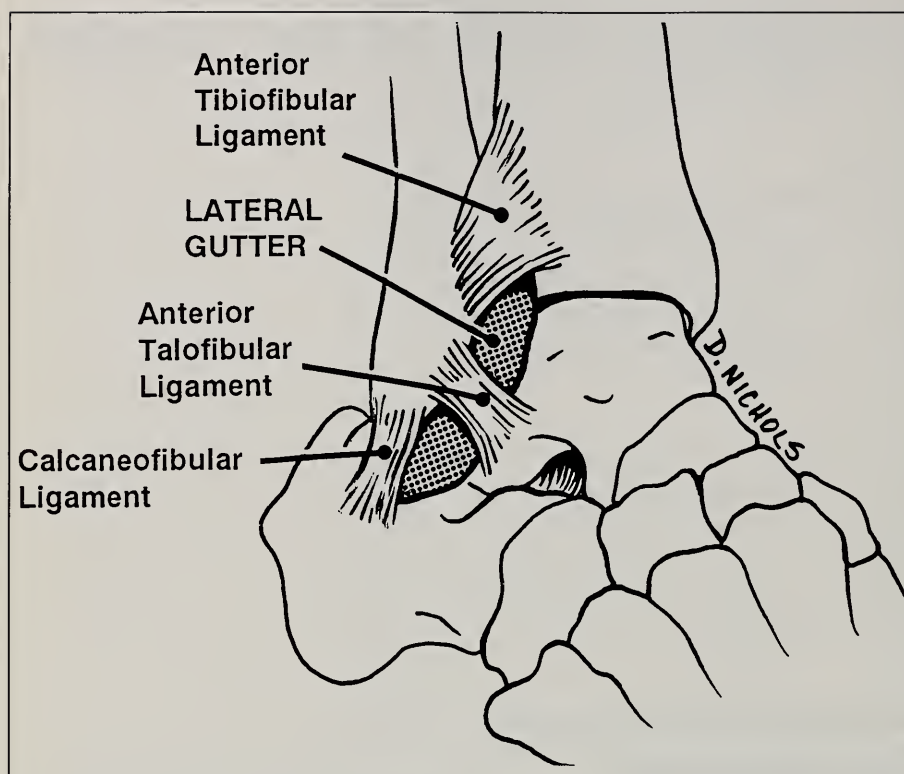


Figure 1 — Anterior anatomy of the ankle.

increased laxity upon performance of the anterior drawer or varus stress tests.

One must be careful in distinguishing pain in the lateral gutter of the ankle joint from pain in the area of the sinus tarsi. If injection of the sinus tarsi with a local anesthetic relieves the symptoms, the diagnosis is not anterolateral impingement.

Chronic lateral ankle ligament instability is not seen in the anterolateral impingement syndrome. One

must be careful in distinguishing pain in the lateral gutter of the ankle joint from pain in the area of the sinus tarsi. If injection of the sinus tarsi with a local anesthetic relieves the symptoms, the diagnosis is not anterolateral impingement.

Radiographs usually show no fractures, no widening of the ankle mortise, and no significant degenerative changes. Anterior tibial osteophytes and/or a shallow talar neck may be present. Stress radiographs of the ankle show an absence of instability. MRI scans usually show an increased soft tissue mass (low intensity signal) in the lateral gutter.

Diagnosis The diagnosis of anterolateral impingement syndrome of the ankle is made clinically. Currently, there is no single clinical test to diagnose soft tissue impingement. However, one should have a strong suspicion of this clinical entity in those patients with chronic ankle pain who have a history of

multiple ankle sprains without evidence of instability.

Treatment

Initially, all patients should undergo conservative treatment consisting of a combination of physical therapy, nonsteroidal anti-inflammatory medication, immobilization, and possible steroid injections. Surgery is indicated if there is a history of ankle sprains with subsequent chronic ankle pain and tenderness in the lateral gutter that is refractory to conventional rehabilitation.

The definitive surgical treatment is operative arthroscopy. A recent study² showed that 26 of 31 patients achieved good to excellent results after undergoing arthroscopic debridement of the ankle for anterolateral impingement. At surgery, 64% of the patients were found to have adhesive bands of scar tissue in the lateral gutter in addition to synovial hypertrophy. Fifty-one percent of the patients had chondromalacia of the anterolateral talar dome. Fifteen percent of the patients had well-developed meniscoid bands of tissues.

Similar meniscoid lesions of the ankle were described by Wolin et al.³ in 1950 and by McCarroll et al.⁴ in 1987. Both of their studies showed that thickened band of tissue was trapped between the lateral malleolus and talus, causing persistent lateral ankle pain after inversion sprain of the ankle.

Pathologic Anatomy

The hypertrophic soft tissue appears to be primarily synovial in origin. However, many authors have reported the presence of meniscoid bands in the lateral gutter in patients with chronic ankle pain.^{3,5,6}

Summary

Anterolateral impingement syndrome of the ankle is caused by entrapment of the hypertrophic soft tissue in the lateral gutter. The impingement process begins when an

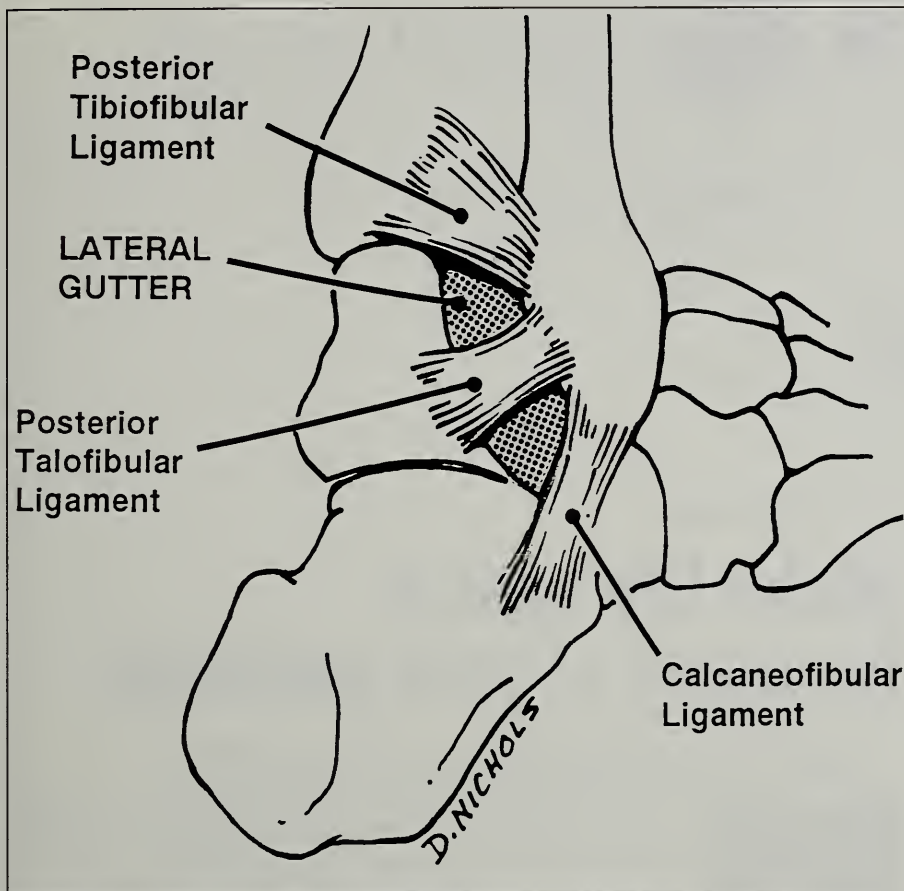


Figure 2 — Posterior anatomy of the ankle.

inversion sprain tears the anterior talofibular, and/or the calcaneofibular ligament. The ligamentous injury is not severe enough to cause chronic instability; however, inade-

quate immobilization and rehabilitation may lead to chronic inflammation in the ligament, resulting in formation of scar tissue. This tissue then becomes trapped between the

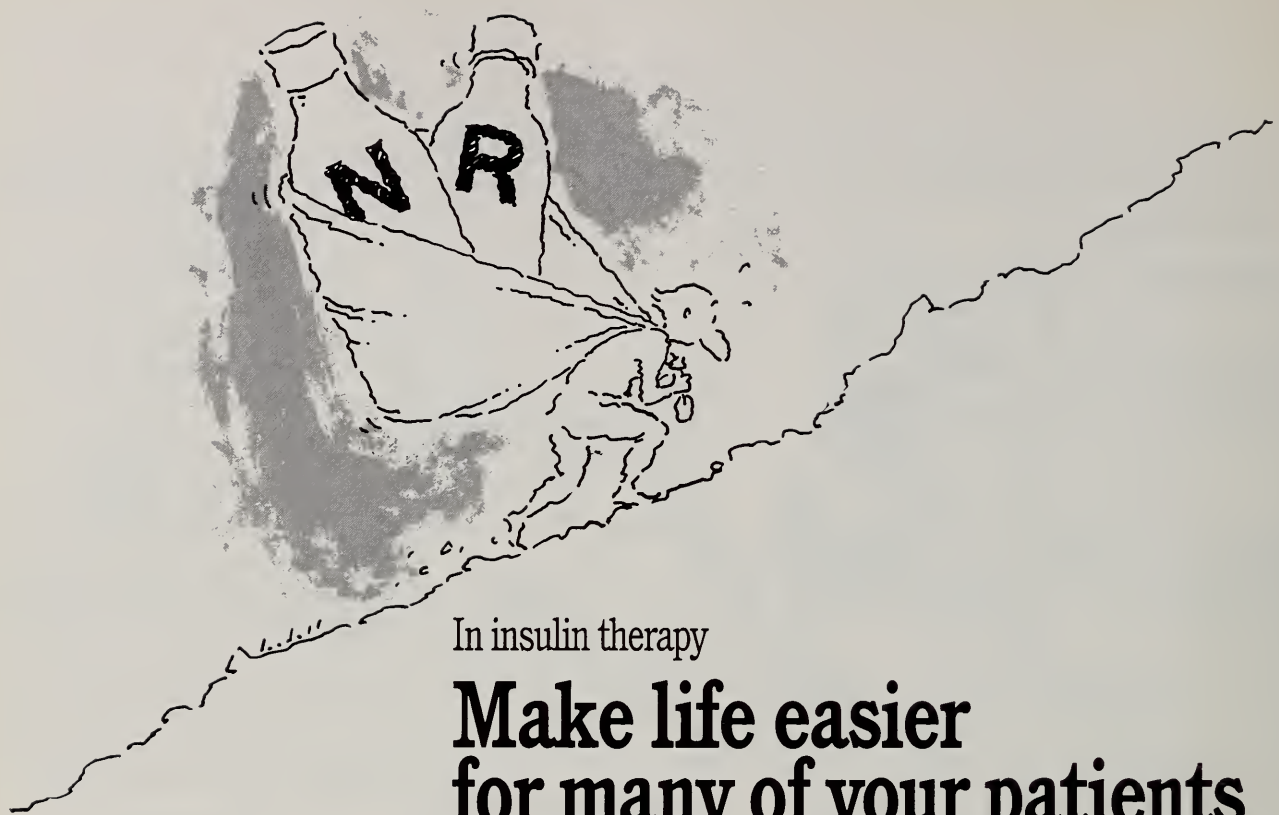
talus and the lateral malleolus, causing irritation, pain, and further synovitis. The end result is chronic lateral ankle pain.

Initial treatment involves physical therapy modalities and nonsteroidal anti-inflammatory medications. Those patients refractory to conservative treatment require arthroscopic debridement.

A recent study² has shown that arthroscopic debridement is successful in relieving pain and disability in high percentages of patients. Most patients were able to return to their previous levels of work and sports. Successful treatment of anterolateral impingement requires an accurate diagnosis with a clinical evaluation that excludes other causes of chronic ankle pain.

References

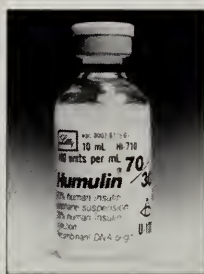
1. Smith RW, Reischl SF. Treatment of ankle sprains in young athletes. *Am J Sports Med* 1986;14:465-471.
2. Ferkel RD, Karzel RP, Del Pizzo W, et al. Arthroscopic treatment of anterolateral impingement of the ankle. *Am J Sports Med* 1991;19:440-446.
3. Wolin I, Glassman F, Sidman S. Internal derangement of the talofibular component of the ankle. *Surg Gyn Obstet* 1950;91:193-200.
4. McCarroll JR, Schrader JW, Shelbourne KD, et al. Meniscoid lesions of the ankle in soccer players. *Am J Sports Med* 1987;15:255-257.
5. Guhl JF. Soft tissue synovial pathology. In: *Ankle Arthroscopy; Pathology and Surgical Techniques*. Thorofare, NJ:1988:93-135.
6. Shonholtz GJ. *Arthroscopic Surgery of the Shoulder, Elbow, and Ankle*. Springfield, IL: Charles C. Thomas, 1987:69.



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Acute Hemarthrosis of the Knee

Champ L. Baker, MD

AN ACUTE INJURY to the knee that is the result of trauma, whether contact or noncontact, should be considered significant if rapid swelling of the joint occurs within 2-6 hours. The rapid extravasation of blood into a joint is defined as hemarthrosis and usually indicates serious injury to one or more structures within the knee. A rapid and accurate diagnosis is essential to successful nonsurgical or surgical treatment of these injuries and return to full activities.

Reports in the orthopaedic literature are consistent with regard to the significance of acute traumatic hemarthrosis of the knee.^{1,6} Noyes et al.⁵ and DeHaven² wrote classic articles summarizing their findings during arthroscopic evaluation of knees with acute hemarthrosis (Table 1). In both studies, the anterior cruciate ligament was ruptured in approximately 70% of the patients. Peripheral meniscal tears occurred in approximately 10% of their patients; however, there was a 50% to 70% incidence of meniscal tears associated with acute tears of the anterior cruciate ligament. Patellar

A rapid and accurate diagnosis is essential to successful nonsurgical or surgical treatment of these injuries and return to full activities.

subluxation or dislocation occurred in 10% to 15%, and osteochondral fracture fragments were found in 2% to 5% of their patients. Other injuries, such as posterior cruciate ligament injuries and capsular tears, occurred in approximately 5% of the patients.

The significance of these findings is apparent when one considers that hemarthrosis of the knee is usually associated with intraarticular injuries which require surgical intervention. Although the history and clinical picture of the patient should dictate the treatment regimen, the examining physician

should be aware of the significance of the hemarthrosis and the probability of articular pathology.

History and Physical Examination

Hemarthrosis occurs in the individual who has sustained a contact or noncontact, twisting knee injury. The patient may report having felt a pop or tear at the time of injury. The pain can even be severe enough to cause nausea. An athlete who has sustained this type of injury usually cannot continue to play and is removed from competition. Fluid rapidly accumulates in the knee within 2-6 hours following the injury. This accumulation of bloody fluid is related to soft tissue rupture or a bone or chondral fracture. A careful history and physical examination are performed to help make the diagnosis.

Whether the examination is performed at the time of injury or later, the technique for acute and chronic injuries should be consistent. The patient should be as relaxed and comfortable as possible in a supine position with both arms

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Table 1. Causes of Acute Hemarthrosis^{2,5}

<i>INJURY</i>	<i>INCIDENCE</i>
ACL tear	70-72%
Patellar subluxation or dislocation	10-15%
Peripheral meniscal	10%
Osteochondral fracture	2-5%
Other (PCL, capsular tear)	5%

placed across the chest. The examiner first looks for evidence of external trauma, whether a bruise, laceration, or cut about the knee. Tenderness elicited by palpation along the medial and lateral joint lines and the patella may indicate the site of injury. The amount of swelling and size of the effusion depends on the cause of bleeding and time from injury to examination.

Although the history and clinical picture of the patient should dictate the treatment regimen, the examining physician should be aware of the significance of the hemarthrosis and the probability of articular pathology.

Clinical tests for stability are performed in the medial, lateral, anterior, and posterior directions.⁷ The abduction stress test with the knee flexed 30° tests the medial structures (Figure 1). The examiner is testing for increased laxity as the leg is brought from a neutral to an abducted position. Palpation along the joint line, the distal femur, or the proximal tibia may help to determine the site of injury.

The adduction stress test with the

leg brought in toward the body and with the knee flexed 30° tests the lateral structures (Figure 2). The classic anterior drawer test performed with the hip flexed 70° and the knee flexed 90° is not always reliable in the acutely injured patient as a test for injury to the anterior cruciate ligament.

An anterior drawer test is more

specific for an injury to the collateral ligaments, but the test is accentuated if the anterior cruciate ligament is torn. The examiner must first test the uninjured leg to obtain the normal anterior drawer. The Lachman test, which is an anterior drawer test in 20° of knee flexion, is accurate 80% to 90% of the time in determining injury to the anterior cruciate ligament in the unanesthetized patient (Figure 3). The examiner should feel an increased excursion of the tibia forward on the femur, but the hallmark or positive test in an injury to the anterior cruciate ligament is a "soft end point" indicating rupture of the anterior cruciate ligament.

The dynamic subluxation provocation test, the so-called pivot-shift or "jerk" test, is performed with the

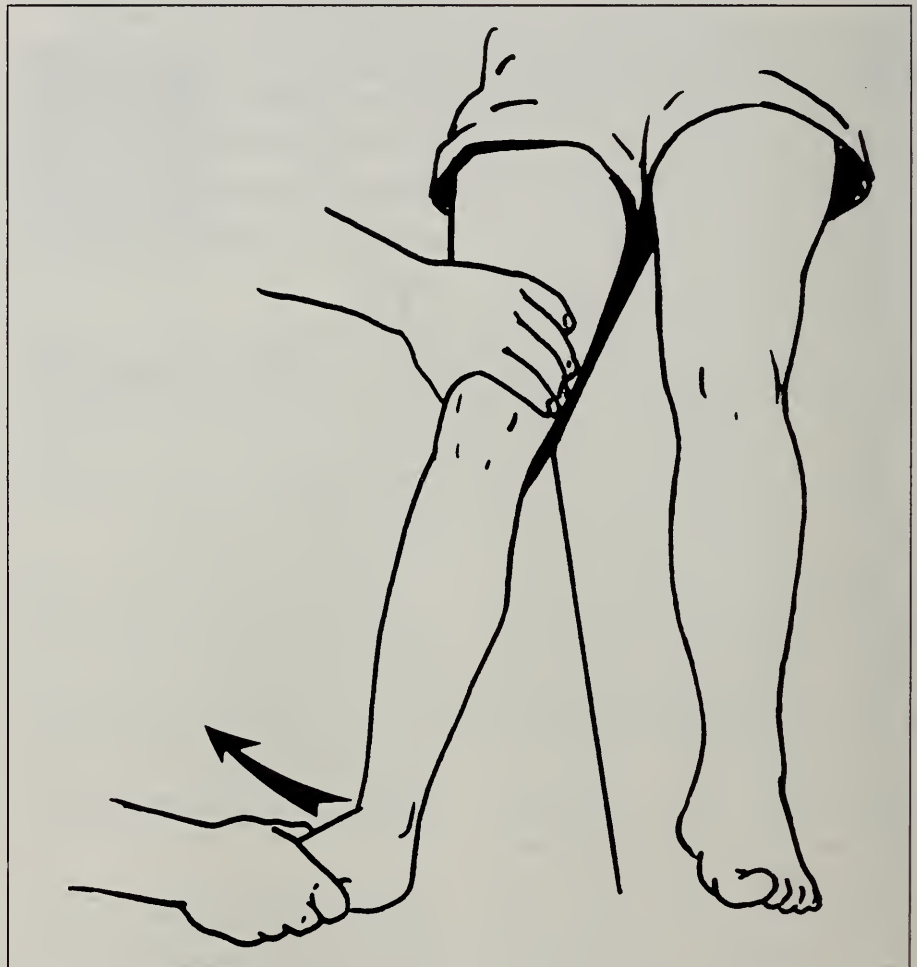


Figure 1 — Abduction stress test.



Figure 2 — Adduction stress test.

patient supine and relaxed. It may be difficult to obtain an accurate test in a patient with hemarthrosis due to the swelling of the joint, the pain, and the apprehension of the patient. The test is necessary to confirm anterior subluxation of the tibia on the femur denoting rotatory instability. With the foot internally rotated, the leg is brought from a position of extension to flexion and then back again. The rapid acceleration or shifting occurs between 20° to 30° of flexion and denotes anterior tibial subluxation and is indicative of injury to the anterior cruciate ligament and lateral structures. Although this test may be difficult to perform preoperatively in the acutely injured patient, under anesthesia it is uniformly positive in a

patient with anterolateral rotatory instability.

Lateral subluxation or dislocation of the patella is also a cause of a hemarthrosis in a significant number of patients. During the examination, the patient may feel apprehension as the examiner attempts to slide the patella laterally. Palpation may reveal tenderness at the point of contact on the distal femoral condyle where the patella has dislocated and spontaneously relocated, or along the medial retinaculum at the site of injury. The examiner must test for patellar stability and not automatically assume that every hemarthrosis is related to an injury to the anterior cruciate ligament.

Ancillary testing to aid in making a diagnosis includes radiographs. Views to be taken are the anteroposterior, lateral, patellar tangential (sunrise), and tunnel views. Magnetic resonance imaging (MRI) is a noninvasive, nonradioactive diagnostic procedure that is being used increasingly by physicians to evaluate knee injuries. Although there are many advantages to MRI, there are some disadvantages such as the cost of the procedure and its inaccessibility to many

practitioners. The reliability of the MRI is usually dependent on the quality of the equipment and the knowledge of the interpreter. If a carefully obtained history, physical examination, and plain radiographs leave the examiner in doubt about the diagnosis or the need for surgical intervention, an MRI is indicated, but it should not be routinely performed in lieu of the history and examination.

Treatment

Arthrocentesis, the aspiration of fluid from a joint, should not be performed routinely for hemarthrosis, because it can provide a source for infection — particularly when done in a nonsterile environment, such as a training room. The procedure is usually not necessary to confirm the presence of blood in the joint, since a history of rapid swelling within 2-6 hours is consistent in more than 90% of patients.

In the case of a large hemarthrosis, however, aspiration may be indicated to relieve the pain of capsular distension, to help in making a diagnosis of osteochondral fracture, or to enable the patient to improve range of motion and begin rehabilitation earlier. If an osteochondral fracture fragment is sus-

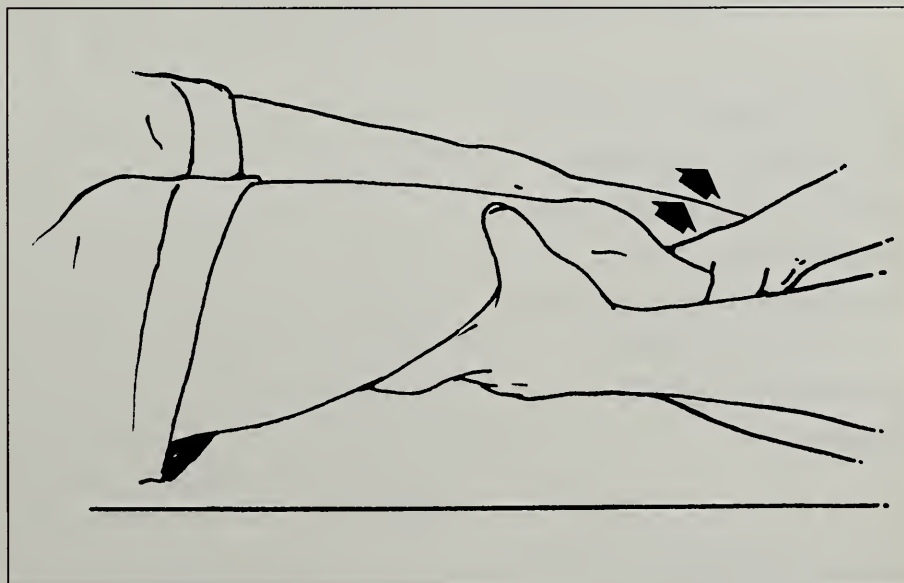


Figure 3 — Lachman test.

pected but does not appear on x-ray films, arthrocentesis may be indicated. Aspiration of blood containing fat globules suggests an osteochondral fracture. In addition, blood has a deleterious effect on articular cartilage, and rapid evacuation of the blood may diminish this effect.

The technique of aspiration involves sterile preparation of the leg.⁸ Used in the case of massive hemarthrosis, the usual site for aspiration is the superior lateral patellofemoral joint. A local anesthetic is used to help alleviate the discomfort. An 18-gauge needle connected to a 30cc syringe is used to evacuate the blood. A Band-Aid can be used to protect the injury site. The practice of leaving a drain in the knee to continue the evacuation of blood is discouraged because of the high risk of contamination and infection of the wound.

After the clinical examination and assessment of stability are completed, the leg is splinted for comfort in a straight-leg immobilizer. If patellar subluxation is suspected, a compression wrap is placed about the knee with a pad placed laterally. Ice is used to help reduce swelling. The patient is given exercise instructions for quadriceps setting with contraction to help pump the blood out of the knee and keep

The examiner must test for patellar stability and not automatically assume that every hemarthrosis is related to an injury to the anterior cruciate ligament.

fluid from reaccumulating. The patient is usually asked to walk with the assistance of crutches.



Figure 4 — Pivot-shift, or "jerk," test.

Arthroscopy

Although history, examination, and ancillary studies usually provide an accurate diagnosis in 90% of patients, it may be necessary to perform arthroscopy to determine the extent of the injury and the most effective treatment for the patient.^{1,5,9,10} An examination under anesthesia can accurately determine the amount of laxity of the collateral and cruciate ligaments and plays an important part in determining whether operative repair is indicated. A meniscal tear may be detected on examination and on MRI, but the arthroscopic evaluation of the tear enables the surgeon to decide whether it should be left untreated, partly excised, or repaired. Osteochondral fracture

fragments can be treated by their removal from the joint.

Although the anterior cruciate ligament may be involved in more than 70% of the knees with hemarthrosis, surgical repair is not required initially in all cases. The patient's age and physical demands on the knee are of paramount importance in determining the need for repair or reconstruction of the anterior cruciate ligament. If a reconstruction is performed during the initial injury period prior to the patient's regaining full motion, there is an increased incidence of postoperative flexion contracture. This can be prevented by delaying surgical intervention until the patient has achieved full range of motion.

Hemarthrosis of the Knee in Children

The skeletally immature individual who sustains significant knee trauma that results in a hemarthrosis presents a different problem.^{1,3} The laxity on examination may be due to a fracture through the epiphyseal plate rather than to ligament instability. Stress x-ray films are helpful preoperatively in determining involvement of the epiphysis and ensuring that laxity is due to damage to the ligaments and not to the bony restraints.

Arthrocentesis should not be performed routinely for hemarthrosis, because it can provide a source for infection.

Boyd and coworkers presented a study of hemarthrosis of the knee in children,¹ revealing that an osteochondral fracture had occurred in 13 of 21 patients, with two patients having fractures in two separate locations. They found only one anterior cruciate ligament tear in

the entire population, a definite contrast in comparison to studies in adults. In the child, acute hemarthrosis is usually associated with a high incidence of osteochondral fractures that represent a significant injury to the knee. In these youngsters, arthroscopy is indicated.

Summary

Rapid swelling of the knee following a blow or twisting injury is considered a significant injury. The history of trauma coupled with a thorough examination should provide an accurate diagnosis in most patients. Although it should not be performed routinely, aspiration of the fluid can be done to aid in making a diagnosis and to alleviate pain. Splinting and re-evaluation are recommended as the initial treatment of an acute hemarthrosis. Ancillary testing that includes x-ray films and MRIs is beneficial.

Although arthroscopic evaluation of the knee is not needed in every patient with an acute hemarthrosis, a high percentage of these patients eventually undergo arthroscopy to complete the diagnosis or as a means of early surgical intervention. The decision to surgically repair an injured structure depends on the patient's age, activity level, amount of instability, and associated lesions. Routine arthros-

copy is indicated as a means to determine the correct treatment and not merely for diagnosis. With knowledge of the common causes of hemarthrosis and understanding of the knee examination, a trained examiner can make an accurate diagnosis 80% to 90% of the time and prescribe the appropriate treatment.

References

1. Boyd DW, Matellic TM, LaMont RL, Aronson DD. Acute hemarthrosis of the knee in children. Presented at the 19th Annual Meeting of the American College of Sports Medicine, Southeast Region, January 30-February 2, 1992, Auburn, Alabama.
2. DeHaven KE. Diagnosis of acute knee injuries with hemarthrosis. *Am J Sports Med* 1980;8(1):9-14.
3. Eiskjaer S, Larsen ST, Schmidt MB. The significance of hemarthrosis of the knee in children. *Arch Orthop Trauma Surg* 1988;107:96-98.
4. Hardaker WT, Garrett WE, Bassett FH. Evaluation of acute traumatic hemarthrosis of the knee joint. *So Med J* 1990;83(6):640-644.
5. Noyes FR, Bassett RW, Grood ES, Butler DL. Arthroscopy in acute traumatic hemarthrosis of the knee. Incidence of anterior cruciate tears and other injuries. *J Bone Joint Surg* 1980;62A(6):687-695.
6. Jain AS, Swanson AJG, Murdoch G. Haemarthrosis of the knee joint. *Injury:Brit J Accid Surg* 1983;15(3):178-181.
7. Hughston JC, Andrews JR, Cross MJ, et al. Classification of knee ligament instabilities Part I. The medial compartment and cruciate ligaments. *J Bone Joint Surg* 1976; 58A(2):159-172.
8. Wolohan MJ, Micheli LJ. Tips of the trade #33. Rapid irrigation of hemarthrosis and debris of the knee in arthroscopy. *Orthop Rev* 1991;20(2):195-196.
9. Routine arthroscopy for acute haemarthrosis of the knee. *Lancet* 1989;1(8638):593-594.
10. Bomberg BC, McGinty JB. Acute hemarthrosis of the knee: Indications for diagnostic arthroscopy. *Arthroscopy* 1990;6(3):221-225.

American Medical Association

Physicians dedicated to the health of America



For Your Benefit

American Medical Association Presses for Student Loans

The American Medical Association is continuing to lobby on behalf of student loans and accreditation issues. AMA lobbyists have targeted congressional members and key committee staff looking for changes in the Higher Education Act.

In the Senate, the AMA is asking for the following changes in S. 1150 to:

- continue current authority to defer student loans, hopefully to three years or until completion of residency,
- retain existing forbearance which postpones loan repayment until

completion of residency, and

- modify pending bill language to allow medical accreditation programs such as LCME and CAHEA [allied health] to continue as they are now.

For bill H.R. 3553 in the House, the AMA is asking to:

- continue and possibly expand current authority to defer student loans, and
- modify bill language so voluntary medical accreditation programs will continue to function as they do currently.

AMA Physician and Consumer Programming on Cable TV

American Medical Television will premiere on NBC's cable division, CNBC, on February 29 with ten hours of up-to-date health care programming. Health information programs designed for consumers will be featured along with separate clinical and current affairs programs for physicians. The service will also provide an expanded forum for communicating urgent health information from the government directly to physicians and consumers. Physician programming will air from 10 a.m. to 1 p.m. EST and consumer programs from 1 to 3 p.m. EST will air on Saturdays and Sundays. Call

toll-free 1-800-SMART-TV for your channel number!

"A central part of the AMA's mission is providing consumers and physicians with important and accurate medical information," said James S. Todd, MD, AMA Executive Vice President. "We expect that watching American Medical Television will become an essential activity of every properly informed physician. We also believe that consumers who are interested in healthy lifestyles will make a habit of watching our public-oriented programs."

The Effects of Heat on the Athlete

Fred L. Allman, Jr., M.D.

FROM 1955 THROUGH 1990, at least 84 heat stroke cases in football players have resulted in death. There were no heat stroke deaths in 1991.¹ This year, as in past years, there will be many unreported cases of "near fatal" heat stroke, and the number of cases of heat exhaustion will probably exceed one thousand. Subclinical cases of heat stress, which are less serious than heat exhaustion or heat stroke, will be responsible for an appreciable loss of efficiency in tens of thousands of athletes throughout the nation. Can these deaths, the near deaths and the lessened performance of heat stress victims be prevented? The answer is an unequivocal "yes." In August, nearly two million young men and boys will begin football practice. In many sections of the country, the temperature will exceed 32.2 degrees C (90 degrees F) and the humidity will go above 70%, an environment conducive to severe heat stress.

According to Buttram, "No one can study the deaths from heat stress as correlated with the climac-

It is important that physicians have a basic understanding of heat stress problems to help avert morbidity and mortality among athletes.

tic conditions for the time and place and type of activity involved without the firm belief that 98% of all such reactions are avoidable. A heat stroke is not a chance proposition like being struck by lightning. It is a predictable phenomenon."² In order to prevent unnecessary mortality and morbidity, it is important that physicians, coaches, and trainers have a basic understanding of the heat stress problem.

Heat problems are the result of an imbalance between heat production and heat loss. The latter is affected by protective clothing and

equipment. Heat generated in the body is a result of muscle activity. If no methods of dissipating the heat existed, a man engaged in light activity would show a rise in body temperature of 12.8 degrees C (9 degrees F) per hour, and would die in about 90 minutes. When environmental temperature is below skin temperature, 70% of heat is lost by radiation, conduction, and convection; nearly 30% is lost by evaporation from the respiratory tract and skin. When environmental temperature rises above skin temperature, we actually begin to take on heat from the environment and must depend entirely on evaporative cooling. Thus, the body's ability to sweat and the air's ability to take on more moisture due to a low humidity become life or death factors.

To lose heat on a hot day, your body must sweat. Blood and energy must be redirected away from the muscles used for physical activity and go to the skin to produce sweat. Sweating is only successful in removing heat when the sweat turns to water vapor (evaporates) and takes heat with it. The sweat

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that drips or is wiped off is of little benefit in cooling. As the humidity (water vapor already in the air) increases, this evaporation of sweat becomes more difficult. The combination of high temperatures and high humidity can be too much for the unacclimated athlete.

In order to become acclimated to a given environment, the athlete must work in that environment and replace water. As the athlete becomes better acclimated, he perspires more profusely, but the perspiration contains less salt. It is, therefore, necessary if you are going to be performing in hot, humid weather that you practice and become acclimated to that environment. This will require less strenuous workouts to begin with, prior to becoming acclimated, and this could take as short a period of time as 10 days or 2 weeks, or perhaps even a month.

It is important to remember that the ability to sweat becomes limited if the fluid level is not adequate. It is essential, therefore, that an athlete participating in hot, humid weather remain hydrated at all times. Fluid should be consumed before, during, and after participation. The best fluid for replacement of water is water. It is also very important that the athlete weigh prior to and after athletic events. Each pound of weight loss is one pound of fluid that has been lost and has not been replaced. Extra water splashed on the face and body functions as sweat as it evaporates and can be used as a helpful adjunct to cooling.

Heat stroke and heat exhaustion are part of a continuum. Heat stroke is an acute medical emergency characterized by rectal temperatures of 40.6 degrees C (105 degrees F) or higher, and central nervous system involvement (i.e., coma, delirium, convulsions). Sweating may be absent or profuse. Some symptoms of heat exhaustion are fainting, nausea and vomiting, headache, cramping, and fatigue.

Prevention of Heat Injury

Special attention must be given to any history of previous heat illness or fainting when exposed to heat, and any sweating or peripheral vascular defects. Certain athletes are susceptible to heat injury: those who are unaccustomed to working in the heat; overweight individuals (especially large interior linemen); eager athletes anxious to impress the coach, who give 100% at all times; ill athletes, especially when the illness is associated with fever, vomiting, and diarrhea; athletes who have received immunizations within the previous 48 hours, particularly when associated with a febrile reaction; and athletes who are taking antihistamines, which may suppress the sweating mechanism.

Sweating is only successful in removing heat when the sweat turns to water vapor (evaporates) and takes heat with it. The sweat that drips or is wiped off is of little benefit in cooling.

Measurements of temperature and humidity on the practice or playing field should be made before and during activity, and the activity level adjusted accordingly. Unnecessary clothing and equipment should be eliminated in hot and humid conditions.

Athletes should be acclimatized to heat gradually, as most adverse reactions occur during the first few days of training. Acclimatization is an adaptive process, describing the diminution in physiological strain produced by application of a constant environmental stress. Achievement of the acclimated

state is marked by a dramatic improvement in the ability to work in the heat.

As noted above, acclimatization requires work in the heat, with salt and water replacement. Heat acclimatization allows sweat production to begin at a lower skin temperature and more sweat to be produced per gland. The sweat of an acclimated athlete contains less salt. Increases in blood volume and blood flow permit more blood to get to the skin surface for cooling, and cardiac workload is reduced.

A football player's off season time may be spent working in air-conditioned comfort, in a sedentary occupation, or not working at all. Consequently, many football players are not acclimatized to heat when formal practice begins. Acclimatization prior to the start of practice may be attained by urging each athlete to exercise on his own daily for the 4 to 6-week period immediately preceding the opening of fall practice. Three to four hours daily of moderate work in the heat over 4-7 days is the necessary minimum. Thus, a program of graded intensity begun 4 weeks prior to the start of practice will bring the athlete to a state of physical condition such that he can then safely begin prolonged workouts in the heat. Only at that time should full clothing and equipment be allowed.

Each player should be weighed daily, before and after each practice session. Sweat losses of 3% of body weight lead to a considerable reduction in work performance. Losses of as little as 2 pounds of water during exercise can reduce ability to perform hard work by 15%. A 7 pound water loss, not at all unusual for a football player, can decrease work ability by 30%. Any athlete with a weight loss greater than 5 pounds should be observed closely; any weight loss over 10 pounds during any practice session should be considered dangerous. Failure to regain overnight the weight which was lost the previous

day usually indicates dehydration of the athlete. The well-conditioned athlete who continues to lose weight for several days must be carefully evaluated.

The following guidelines will help determine the playability of the athlete:

- Less than 3% of body weight per practice is acceptable.
- 3-5% loss of body weight per practice is in the gray area. These athletes should be watched closely and careful attention paid to their fluid replacement during practice.
- The athlete with greater than 5% loss of body weight per practice should not be allowed to continue practice and should be re-evaluated the next day.
- The athlete with greater than 7% loss of body weight per practice should be referred to a physician and should not be allowed to practice until cleared by the physician.

Diagnosis and Treatment of Common Heat Illnesses³

Diagnosis: Heat Cramps

Associated with whole body salt deficiency. Cramps occur in abdominal wall and large muscles of the extremities but differ from exertion-induced cramps; entire muscle not involved; cramp appears to wander because individual muscle bundles contract. Plasma Na⁺ deficit; urine NaCl concentration from a trace to 3 gm/L; 51 mEq/L, with specific gravity greater than 1.016. Observed mostly in unacclimatized individuals.

Treatment — Oral 0.1% saline solution (two 10-grain salt tablets in 1 L water) or IV 0.5 -1.0 L normal saline solution. Intravenous solutions, used when symptoms include nausea and vomiting, bring rapid relief with no lasting sequelae.

Diagnosis: Heat Exhaustion

Inability to continue activity in the heat. Symptoms may include

nausea, vomiting, irritability, headache, "heat sensations" on head and trunk, or orthostatic changes, syncope, dyspnea, weakness, piloerection. Rectal temperature up to 39 degrees C (102.2 degrees F) depending on the physical activity that preceded overt illness and the point at which temperature was first recorded. Sweating is profuse. Mental function and thermoregulation are mildly impaired. Acclimatization reduces incidence of symptoms. There are three types of heat exhaustion; the first two involve peripheral vascular collapse:

In the early stages of heat exhaustion, treatment is removal of the athlete to a cool environment, replacement of fluid, and re-acclimatization.

1. Water depletion. Hypohydration, prominent thirst; cramps seldom seen; onset possible with a few hours of exercise.

2. Salt depletion. Prominent fatigue, cramps, vomiting, progressive weakness; thirst seldom observed; onset within 3-5 days.

3. Nonclassic exercise-induced. Tetany, carpopedal spasms, abdominal cramps, syncope, respiratory alkalosis (all induced by hyperventilation); absence of primary salt or water depletion; onset of overt symptoms is acute.

Treatment — *Type 1 and 2.* Rest and cooling increase venous return to heart. Mixed salt/water depletion is usually seen. Replace water and electrolytes based on measures of serum Na⁺, protein, blood urea nitrogen, hematocrit, pulse, blood pressure, or orthostatic changes. After the duration of exercise and heat exposure and the amount of fluid intake are determined, water

and electrolyte loss may be estimated as 1.5 L water and 2 gm. NaCl per hour of continuous, moderate to heavy exercise. (Typical losses during a four hour work shift in harsh conditions are 6.0 L water and 8 gm NaCl.)

Treatment — *Type 3.* Rest, cooling, and rebreathing of expired air.

The prognosis is best when mental acuity is not altered and when serum enzymes are not elevated. Immediate return to work/exercise is inadvisable, except in mildest cases; allow 24-48 hours for recovery.

Diagnosis: Exertional Heatstroke

Thermoregulatory failure, rectal temperature of 39.4 -40.6 degrees C (102.92 -105.1 degrees F) or higher. Other symptoms include elevated serum enzymes (aspartate aminotransferase, alanine aminotransferase, lactate dehydrogenase, creatine phosphokinase), hypotension, vomiting, diarrhea, coma, convulsions, and frank impairment of mental function and temperature regulation. Sweating may or may not be present. Onset may be rapid in patients who have been exercising.

Treatment — This is a true medical emergency. Intubate patient if comatose or convulsing. If cardiovascular difficulties are severe or if peripheral blood flow is compromised, use conductive cooling by immersing the patient in ice water. Immersion therapy not only provides the fastest cooling rate when rectal temperature is greater than 40.6 degrees C (105.1 degrees F), but also improves venous return and cardiac output via skin vasoconstriction and the effects of hydrostatic pressure. Seek a cooling rate of 0.15 degrees C/minute (32.27 degrees F) until rectal temperature reaches 37.88 degrees C (100.4 degrees F), then monitor. In most cases, the rectal temperature reaches 37.8 degrees C (100.4 degrees F) within 30 minutes. Monitor rectal temperature for rebound hy-

perthermia at regular intervals for 24-48 hours. Administer intravenous fluids judiciously (1.0 -1.5 L); consider possible pulmonary edema. Analyze serum enzymes and coagulation factors for 7 days. Monitor renal and acid-base status. Complications may include central nervous system damage, renal failure, rhabdomyolysis, disseminated intravascular coagulation, and hepatic or myocardial necrosis. The prognosis is best when peak rectal temperature is less than 42.2 degrees C (107.96 degrees F), serum aspartate aminotransferase less than 1,000 U/L in the first 24 hours, and duration of coma is less than 2 hours. The mortality rate (10% - 80%) is directly related to the duration and intensity of hyperthermia as well as to the speed and effectiveness of diagnosis and treatment.

Treatment Summary

When heat stroke is suspected, the athlete should be stripped, fanned, and kept moist and cool with ice packs while being hurried to the hospital. Upon arrival at the hospital, the fever should be lowered to 38.8 degrees C (102 degrees F) in less than an hour.

Monitor the patient's rectal temperature and make sure it does not

begin to rise again. Start a continuous intravenous saline drip. When rectal temperature has been lowered to 38.8 degrees C (102 degrees F), treatment may be continued in an air-conditioned room, where fanning or hypothermic blankets are used as needed. Blood pressure, pulse, arrhythmias, or pulmonary edema must be normalized. Renal status should be assessed, as rhabdomyolysis may occur and require diuretics. Give plenty of fluids, but not enough to produce pulmonary edema.

In the early stages of heat exhaustion, treatment is removal of the athlete to a cool environment, replacement of fluid, and re-acclimatization. Advanced stages of the condition require hospitalization. Symptoms of heat exhaustion include fatigue, weakness, headache, nausea, vomiting, loss of appetite, muscle cramps, and possibly diarrhea or fainting.

The following suggestions are offered to help prevent heat exhaustion and heat stroke during athletic activity in hot weather.

1. Most adverse reactions to environmental heat and humidity occur during the first few days of training.
2. Acclimatize athletes to hot weather activity by carefully graduated practice schedules.

3. Provide rest periods of 10 minutes each half hour during workouts of an hour or more in hot weather.
4. Supply loose and comfortable white clothing.
5. Furnish water in unlimited quantities and encourage athletes to drink frequently.
6. Watch athletes for signs of trouble, particularly the determined athlete who may not report discomfort.
7. Remember that the temperature and humidity, not the sun, are the important factors. Heat exhaustion and heat stroke can occur in the shade.
8. Weigh athletes before and after each workout. Evaluate carefully those who lose 3% of body weight or more.
9. Check environmental conditions (Wet Bulb Globe Temperature — a measure of heat stress) before and during practice and games, and adjust activity accordingly.

References

1. Mueller FO, Schindler RD. Annual Survey of Football Injury Research. American Football Coaches Association, 1931- 1991.
2. Buttram WR. Personal communication.
3. Hubbard RW, Armstrong LE. Hyperthermia: new thoughts on an old problem. *Physician Sports Med* 1989;17:6.

Cardiac Arrhythmias in Presidents and Other Athletes

John D. Cantwell, MD, Steve Lammert, MD

WHEN PRESIDENT BUSH developed atrial fibrillation while jogging, national attention was focused on this rhythm disturbance, and that it can occur in apparently healthy, active individuals. Fortunately, dysrhythmias of a potentially serious nature are infrequent in athletic types. When they are encountered, however, they can be frustrating to the patient and challenging to the physician, both from the diagnostic and therapeutic standpoints. The following two cases reflect examples from our center.

Case Reports

Case #1

A 38-year-old distance runner was evaluated for symptoms of rapid heart beating and "fluttering," beginning after a 14-mile run and lasting overnight. Subsequent episodes were unrelated to activity and occurred up to once or twice daily, lasting several minutes. He also had an unrelated sensation of something being "caught or stuck" in the mid-chest area, worse when lying flat and associated with

Presented are examples of both supraventricular and ventricular rhythm disorders which can occur in athletic individuals, even presidents.

an urge to belch.

His past medical history was unremarkable. He had never smoked cigarettes and averaged only 3-4 standard alcoholic drinks per week. He didn't follow any special diet and averaged one cup of coffee and a caffeinated soft drink daily. His mother (a smoker) had died of a heart attack at age 49, as had her brother at age 50.

On physical examination, his

blood pressure was 140/85 mm Hg and the pulse 52 beats per minute (bpm). The chest was clear on auscultation, and the cardiovascular exam was normal.

Routine blood studies were unremarkable, including a total cholesterol of 173 mg/dl. The HDL was initially 37 mg/dl, but up to 54 mg/dl on rechecks. The T4 was normal. The resting ECG revealed only sinus bradycardia. On treadmill testing, he had a duration of 15.3 minutes on the Bruce protocol and developed atrial flutter with 2:1 block (Figure 1) post-exercise. An echocardiogram was normal.

Over the ensuing years, he continued to be bothered by frequent palpitations, documented as atrial flutter with variable block on multiple occasions, despite drug trials with digoxin, quinidine, verapamil, procainamide, beta blockers (such as pindolol), and encainide, disopyramide, and flecainide.

He was referred for electrophysiology study and found to be resistant to anti-tachycardia pacing. He was then enrolled in a Sotalol Drug Study and has had a generally fa-

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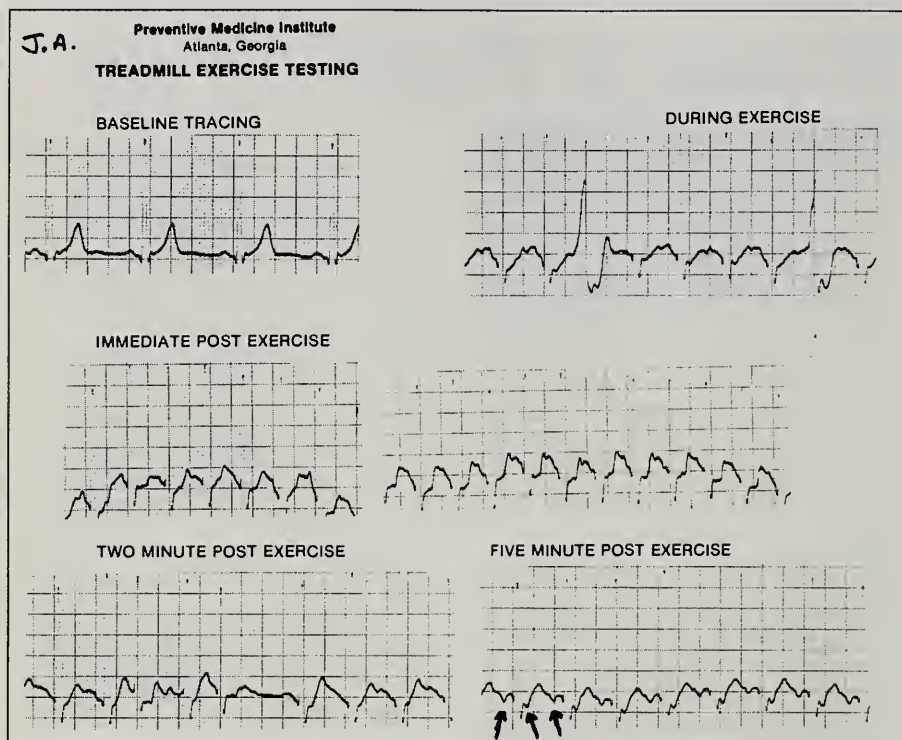


Figure 1—Atrial flutter with 2:1 atrio-ventricular block in Case #1.

vorable response to 160 mg twice daily. He did have a mild embolic cerebrovascular event, with weakness and incoordination of the left arm, and has fully recovered from this. Anticoagulation with warfarin sodium has been done.

Comment

Atrial flutter, a fairly common supraventricular tachyarrhythmia (SVT), can occasionally be very difficult to control, even in an otherwise apparently normal individual. Multiple Class I and Class III antiarrhythmic agents (Table 1) were ineffective, as were beta-adrenergic blockers, calcium channel blockers, and digoxin. Sotalol, a class III drug, has been of some help, but didn't prevent an embolic episode nor markedly alleviate the palpitations. Embolic events can occur in so-called "lone" atrial flutter or atrial fibrillation, and anticoagulation with low doses of warfarin sodium should be considered. This may be imprudent in certain sports that involve body contact, so aspirin should be prescribed.

Case #2

A 34-year-old woman, also a runner, developed dizziness, nausea, and a "lead-like" feeling in her legs, associated with palpitations and sharp left anterior chest pain. The symptoms occurred about 2 km into a 10-km road race. In the medical emergency tent, her initial blood pressure was unobtainable and subsequently palpated at 68

mm Hg. The pulse was said to be fast, but the rate wasn't recorded. An IV was started, and a life support unit was summoned. An EKG rhythm strip showed sinus rhythm. Her symptoms subsided, and she was released. A friend advised cardiology consultation.

When evaluated several days later, she indicated two prior episodes of dizziness and near-syncope, both related to physical activity. Her past medical history indicated a 60-pound weight loss through dieting, over a 1-year period, 3 years previously. Her only prior hospitalizations were for diagnostic laparoscopy for nonspecific pelvic pain.

She had never smoked cigarettes, averaged only two glasses of wine per week, and avoided caffeine. Her typical weekly running mileage was 20-22.

On physical examination, her blood pressure was 120/78 mm Hg, and the pulse was 78 bpm and regular. The chest was normal. On cardiac examination, a grade one short systolic ejection murmur was heard at the cardiac apex and was abolished with Valsalva's maneuver.

The resting ECG (Figure 2) revealed T wave inversion in leads V1-4, which did not change over several weeks. Cardiac enzymes

Table 1 — Classification of Antiarrhythmic Agents

Class I (Sodium Entry Blockers)	
1a-Quinidine, Procainamide, Disopyramide (Norpace)	
1b-Tocainide (Tonocard)	
Mexiletine (Mexitil)	
Lidocaine	
1c-Flecainide (Tambacor)	
Propafenone (Rythmol)	
Multiclass	Ethmozine (Moricizine)
Class II (Beta-adrenergic Blockers)	
Class III (Prolong Repolarization)	
Amiodarone (Cordarone), Sotalol, Bretylium	
Class IV (Calcium Channel Blockers)	
Miscellaneous	
1. Digoxin	
2. Adenosine (Adenocard) — IV use	

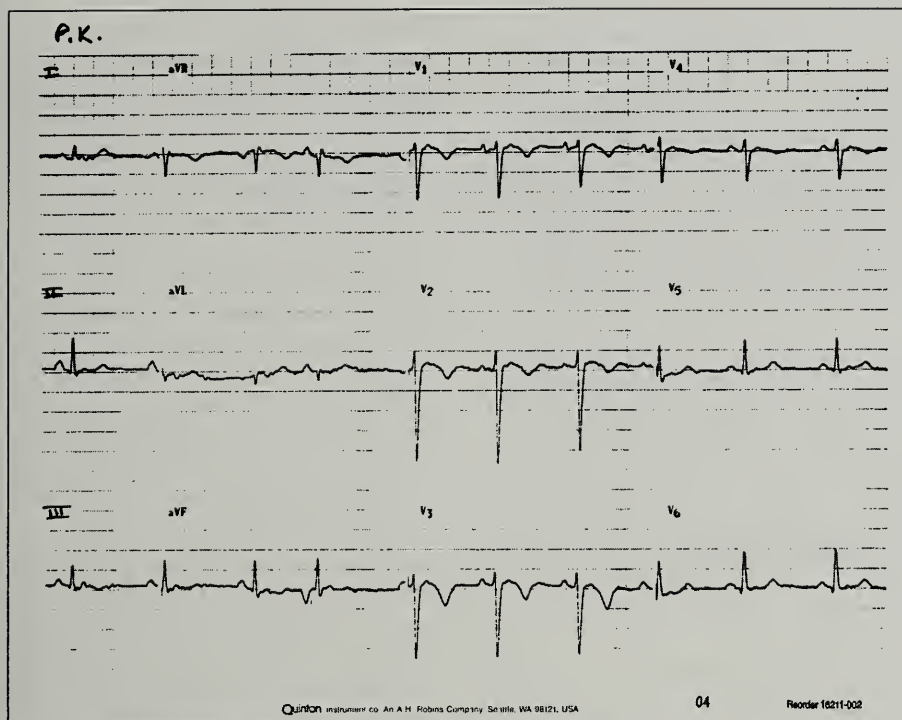


Figure 2 — Resting ECG in Case #2, showing T-wave inversion in leads V1-4.

were normal. A subsequent exercise test revealed a treadmill time of 17 minutes (Bruce protocol), to a peak heart rate of 174 bpm and blood pressure of 190/80 mm Hg. The exercise ECG showed a normal ST-segment response to 90% of age-predicted maximum heart rate, and pairs of ventricular premature beats (VPBs) (Figure 3). An echocardiogram was normal. A 24-hour continuous ambulatory ECG did not show ST-segment evidence of coronary vasospasm, always a consideration in these cases.

Electrophysiology studies (EPS) revealed reproducible non-sustained and sustained monomorphic ventricular tachycardia (Figure 4), at a rate of 200 bpm, terminated with overdrive ventricular pacing. The EPS was repeated after therapeutic trials of disopyramide, verapamil, and propafenone. The latter, at a dose of 900 mg/day, was successful in preventing pacing-induced VT. Because of subsequent palpitations on follow-up, a small dose of atenolol (25 mg/day) was added. This combination

has been effective in preventing any serious clinical episodes during a 14-month observation period.

The patient has been followed in a cardiac rehabilitation program, emphasizing distance walking instead of jogging. Recent repeat EPS has localized the irritable focus to the right ventricular outflow tract. Ablation of this focus with radiofrequency pacing has been scheduled.

Comment

This athletic woman has evidence of sustained VT in the absence of other underlying cardiac disease. Because of the severe hemodynamic compromise, during a fun run, EPS was performed after other non-invasive studies were unrevealing. An appropriate antiarrhythmic drug, propafenone, was selected, after careful laboratory study. A new technique, radiofrequency ablation of the arrhythmic focus, offers hope of a cure.¹

Discussion

There are several questions the

physician tries to answer to in the management of such athletes:

- 1) *Is the arrhythmia symptomatic or asymptomatic?* The latter generally do not require drug therapy. The former may, depending on the degree of symptoms.
- 2) *Is the rhythm disturbance supraventricular or ventricular in origin?* Supraventricular dysrhythmias are rarely life-threatening, whereas ventricular dysrhythmias can be.
- 3) *Is there evidence of underlying cardiac disease?* If so, one might be more inclined to use an antiarrhythmic agent, realizing that such drugs can be pro-arrhythmic (in 10 percent or so).
- 4) *Are there extra-cardiac problems that could be contributing factors?* Examples include hyperthyroidism (as in President Bush's case), pheochromocytoma, and drug abuse (cocaine, adrenalin-like substances including over-the-counter decongestants).

In each patient encountered, we ask ourselves the five questions pertaining to symptomatology, anatomic source of the arrhythmia, presence or absence of underlying cardiac disease, and precipitating factors.

- 5) *Are there precipitating factors for the arrhythmias?* In a recent report on atrial fibrillation (AF) in athletic people, for instance, we found multiple cases where intake of cold liquids or ice cream, exercise, excessive alcohol, or caffeine were triggers of the AF.²

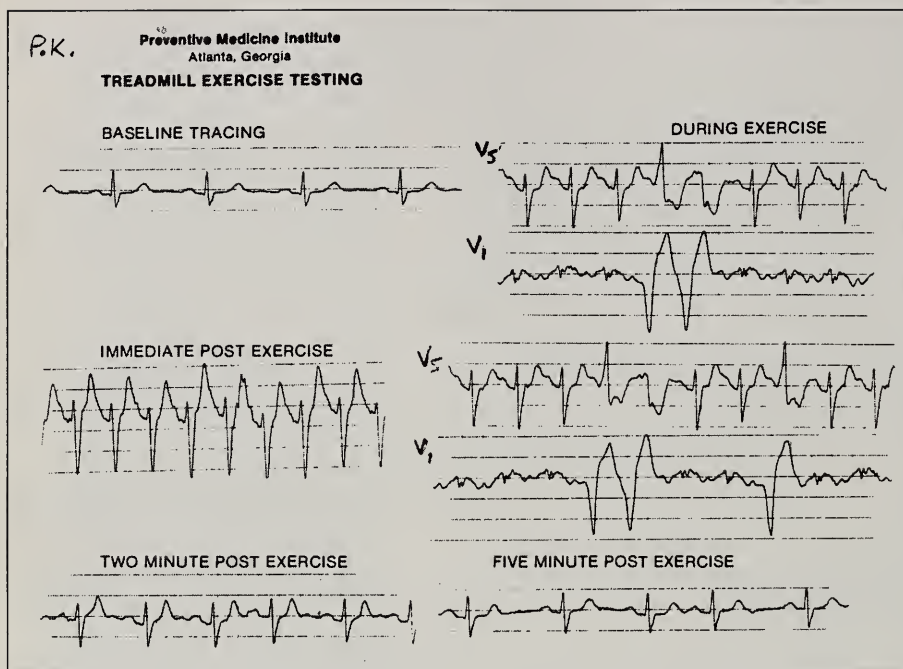


Figure 3 — Exercise ECG in Case #2, showing pairs of VPBs and a normal ST-segment response.

Case #1 is an example of atrial flutter, one of the SVTs. The term, SVT, is a very broad one, like calling all types of joint symptoms "arthritis". Other common types of SVT include atrial fibrillation, accessory pathways such as in the W-P-W syndrome, and atrio-ventricular nodal re-entrant tachycardia (AVNRT).³ The latter may be initiated and terminated by APBs or VPBs. The QRS complex appears normal in width and P waves are generally absent, buried within the QRS.

Vagal maneuvers (Valsalva, carotid massage, immersing the face in a washbasin of cold water, etc.) may slow or abruptly terminate AVNRT. When this is ineffective, one can try IV adenosine, calcium channel blockers (such as verapamil), digoxin, and type 1-A or type 1-C antiarrhythmic agents.^{4,5}

In atrial flutter or fibrillation, one objective is to slow the ventricular rate to <100 bpm, using digoxin, verapamil, or beta blockers.⁶ One can then try to *convert* the rhythm to normal sinus using type 1-A or

type 1-C* agents. Electric cardioversion may be necessary when this fails. In order to *maintain* sinus rhythm, type 1-A or type 1-C drugs may be tried. We generally begin with procainamide. Because of some concerns about the pro-arrhythmic effects of quinidine,⁸ we usually begin this drug with the patient under direct surveillance (in an outpatient or inpatient setting).

New techniques such as radiofrequency ablation of the dysrhythmic focus may obviate the need for chronic drug therapy in selected cases.

*Flecainide (Tambocor) is the only type 1-C agent approved by the FDA, for patients "with disabling symptoms but without evidence of organic heart disease." One must be alert to the induction of wide-complex tachycardias, often exercise-induced, when using type 1-C drugs.⁷

Ventricular tachycardia, as in case #2, is relatively rare in otherwise normal individuals. Oakes et al⁹ studied 14 patients (mean age 40 years), all of whom had normal cardiac catheterizations. Endomyocardial biopsies were normal in six and revealed subendocardial and interstitial fibrosis in seven. One had monocytes with periodic acid Schiff positive granules. The biopsy information revealed that some so-called "normal" hearts may have abnormalities at the cellular level. However, none of the biopsies led to a specific treatable diagnosis.

Mont et al¹⁰ found that in 53 patients with idiopathic ventricular tachycardia, 37 (70 percent) were predominately related to exercise. The latter had no prognostic implications, and overall the prognosis was good during a mean follow-up of 2.9 ± 2.5 years, with only one sudden death. Class III anti-arrhythmic agents (such as amiodarone and sotalol) were the most effective in preventing recurrence of the VT; beta blockers, on the other hand, were relatively ineffective.

Viskin and Belhassen¹¹ reported 14 ostensibly healthy patients who had documented ventricular fibrillation (VF) and reviewed 35 other similar cases from a literature search. The 1-year sudden death rate from recurrences was 11 percent. Class IA drugs were generally effective in preventing induction of the arrhythmic in the electrophysiology laboratory. The extremely rare case of an exercise-induced cardiac death in which the necropsy is unrevealing could be due to this disorder.

Summary

We presented examples of both supraventricular and ventricular rhythm disorders which can occur in athletic individuals, even presidents. The vast majority of rhythm problems we deal with in athletes are fortunately benign, entities such as frequent atrial ectopic beats or VPBs.

In each patient encountered, we ask ourselves the five questions noted in the discussion pertaining to symptomatology, anatomic source of the arrhythmia, presence or absence of underlying cardiac disease, and precipitating factors.

The most common more sustained SVTs we see are AVNRT and atrial fibrillation. Atrial flutter is less common. These are more of a nuisance to patients rather than a threat to their lives, although rarely cerebral embolic events can occur. Therapy includes avoidance of precipitating factors and, when necessary, a sequential trial of available drugs, carefully documenting the response and watching closely for any pro-arrhythmic events.

We infrequently see NSVT in athletes, even triplets of VPBs on exercise testing, and rarely see instances of sustained VT. The latter merits a careful search for underlying cardiac disease and usually electrophysiology-guided drug therapy. New techniques such as radiofrequency ablation of the dysrhythmic focus may obviate the need for chronic drug therapy in selected cases.

References

1. Scheinman MM. Catheter ablation. Present role and projected impact on health care for pa-

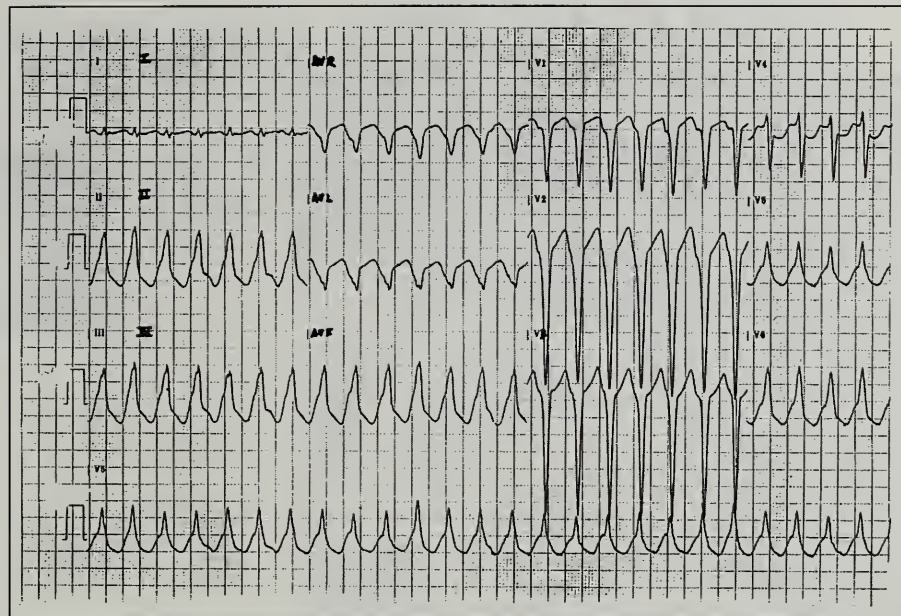


Figure 4 — Ventricular tachycardia in Case #2, induced in the electrophysiology laboratory.

tients with cardiac arrhythmias. *Circulation* 1991;83:1489-1498.

2. Cantwell JD, Lammert S, Kessler C. Lone atrial fibrillation. *Phys Sportsmed* 1991;19:71-82.

3. Bren GB, Katz RJ. Paroxysmal atrial tachycardia. Diagnosis and evaluation. *Pract Cardiol* 1981;7:57-54.

4. Manolis AS, Estes NAM III. Supraventricular tachycardia. Mechanisms and therapy. *Arch Intern Med* 1987;147:1706-1716.

5. Dreifus LS. Antiarrhythmic drug selection in supraventricular tachycardia. *Mod Med* 1988;56:82-98.

6. Pritchett ELC, Anderson JL. Antiarrhythmic strategies for the chronic management of supraventricular tachycardias. *Am J Cardiol* 1988;62:1D-2D.

7. Falk RH. Flecainide-induced ventricular

tachycardia and fibrillation in patients treated for atrial fibrillation. *Ann Intern Med* 1989;111:107-111.

8. Coplen SE, Antman EM, Berlin JA, et al. Efficacy and safety of quinidine therapy for maintenance of sinus rhythm after cardioversion. *Circulation* 1990;82:1106-1116.

9. Oakes DF, Manolis AS, Estes NAM III. Limited clinical utility of endomyocardial biopsy in patients presenting with ventricular tachycardia without apparent structural heart disease. *Clin Cardiol* 1992;15:24-28.

10. Mont L, Seixas T, Brugada P, et al. Clinical and electrophysiologic characteristics of exercise-related idiopathic ventricular tachycardia. *Am J Cardiol* 1991;68:897-900.

11. Viskin S, Belhassen B. Idiopathic ventricular fibrillation. *Am Heart J* 1990;120:661-671.

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Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

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Indications: Yocon® is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

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Warning: Generally, this drug is not proposed for use in females and certainly not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

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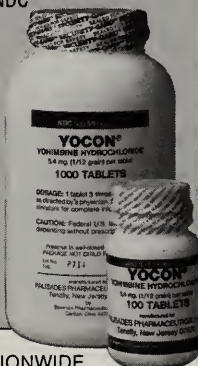
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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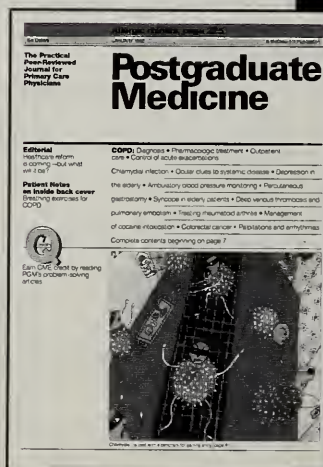


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Treating Injuries in Tennis

William B. Mulherin, MD

STATISTICS on tennis injuries are hard to come by, as there is no specific organization recording in any efficient manner the number of injuries that occur during a year. In the State of Georgia, there are roughly 32,000 members of the Georgia Tennis Association. There are 65,000 members of the Atlanta Tennis Association. These organizations have no recording of incidence of injury.

The following information is a compilation of 26 years of private orthopedic practice, with the emphasis on treating athletic injuries and having served as Orthopedic Consultant of Georgia tennis teams and numerous NCAA tennis championships.

There are certain injuries that are common to all sports, in particular, fractures. These, however, are a rare occurrence in tennis competition. Colles fractures, fractured clavicle, bimalleolar fracture, radial head fracture, rib fracture, "Ballet" fracture, navicular fracture, and Jones fracture have all been seen from inadvertent falls in tennis, over the years.

An overview of the clinical presentation of common tennis-associated injuries, with recommended treatment and rehabilitation programs.

The majority of injuries in tennis are in the realm of overuse. Many young aspirants of tennis start at age of 6 and by the time they reach college age, they have accumulated more hours on the tennis court than many of us older players will accumulate in a lifetime.

Epicondylitis

Epicondylitis is one of the nemesis of tennis players. It occurs at some point in almost all player's careers. It usually occurs over the

lateral epicondyle, but in the elite player, it also may occur medially. It represents a micro tear of the attachment of the extensor or flexor muscles of the wrist and hand. On the lateral side, the extensor carpi radialis brevis is the most commonly incriminated, since its attachment is deepest of the extensor group. It occurs more commonly from overload of the area, from hitting a backhand off center, or late with a leading elbow. On the medial side, it is seen especially in those players that hit with a lot of top spin on their forehand, rolling over the top of the ball, stressing the pronator teres, and in also those that hit a lot of top spin on their serving stroke, the American Twist. Both share a strain or overload of the extensor flexor wad, progressing to micro tears and scarring, which is a chronic problem, if left untreated.

In the older player, differentiation must be made between radiohumeral joint degeneration and nerve root irritation from cervical spondylosis. The diagnosis is confirmed by point tenderness over the

Dr. Mulherin practices orthopedic surgery. He has served as Orthopedic Consultant of Georgia tennis teams and numerous NCAA tennis championships. Send reprint requests to him at 125 King Ave., Athens, GA 30601.

lateral or medial epicondyle and exacerbation of discomfort by forced extension or flexion against resistance.

In the older player, differentiation must be made between radiohumeral joint degeneration and nerve root irritation from cervical spondylosis.

In lateral epicondylitis, contracture of the extensor musculature is commonly seen. This is measured with the elbow in full extension, followed by palmar flexing of the wrist and comparing the two sides. Often a gunsight deformity or bony prominence of the lateral epicondyle can be seen in these individuals. In chronic cases, atrophy of the extensor musculature can actually be seen. Tenderness and pain extend down the extensor muscles into the forearm, along the course of the extensor carpi radialis brevis. X-rays are usually normal and are obtained mainly to exclude degenerative changes in the elbow, in particular osteochondritis of the capitellum and medial spurring from Little League ball or baseball pitching.

These patients are likened to those with plantar fasciitis, in that I spend 20-30 minutes of my time selling them on the concept of slow rehabilitation of the musculature and 10 minutes on diagnosis and explanation of the rehab method. Most want a quick fix, in particular a steroid injection, which in my experience is fraught with an occasional improvement, but further worsening of the problem in the long run.

Treatment consists of stretching the extensor musculature by extending the elbow and forcefully palmar flexing the hand. Strengthening is begun with isometric exercises, the elbow is flexed, and the fingers are extended, pressure is made isometrically against the ends of the index, long, and ring fingers, forcefully dorsiflexing the wrist against the opposite hand. This is done short of significant discomfort, with the concept of strengthening a scarred or torn area and not tearing it further. This is done 15-20 times for an 8-second contracture, two to three times a day or more often, as the muscles become more tolerant and more forceful contractures can be performed.

During this period, the use of N'SAIDs and occasionally some physical therapy with EGS and ultrasound can be helpful. Also, I commonly use the non-yielding tennis elbow strap. As contracture strength is increased and pain diminishes, I begin a dynamic resistive program, starting with very light weights and progressing to 5-8 pounds for the extensor muscles.

The patient will feel when s/he is ready to return to play, but generally we start by hitting balls against a backboard and then progress to ground strokes as tolerated. The player should continue the exercises on a permanent basis prophylactically. In my experience, a minimum of 4-6 weeks is required to attain rehabilitation of the musculature.

On the medial side, supination and extension of the wrist is performed to stretch the pronator teres and wrist flexors. Isometrics for the flexors and pronator are both required and then dynamic resistive exercises along the same fashion.

Certain techniques of tennis and equipment changes can help in this condition. A tennis racquet that has shock absorbing capacity and dampens vibration helps. This is true of the more recently devel-

oped composite racquets. Larger grips lighten the load of the racquet distally and afford more dampening of vibration. The technique of locking the elbow and radially deviating the wrist and shifting the body weight into the ball, hitting the ball in front of you, greatly diminishes overload on the extensor muscles. For the medial epicondylitis, it helps to mix up the ground strokes so one doesn't consistently hit top spins, but combines flat and slice shots. Also with the serve, flat and slice serves, combined with overspin, help prevent persistent overload of the medial side.

Something needs to be said for steroid injection. I prefer Decadron and Xylocaine, since it doesn't leave a residue in the tissue. This is of benefit for only 3 weeks, but it helps an individual get into the exercise program a little bit more comfortably when they are discouraged. There is a rare instance of one injection completely relieving the pain. The individual with this result will invariably send a half dozen patients into the office requesting the same injection. I have found a surgical approach more helpful in the mechanics and not in the athlete. Therefore, I have done less and less surgery and more on my conservative approach.

For the medial epicondylitis, it helps to mix up the ground strokes so one doesn't consistently hit top spins, but combines flat and slice shots.

Shoulder Problems

Probably the epitome of overuse injuries, as in baseball pitching and

other overhead sports, are shoulder problems. Elite tennis players show hypertrophy of the trapezius, latissimus, deltoid, and forearm muscles. The older player often will show a drooping shoulder from constant stretching over the years. From this stretching, almost all patients exhibit mild subluxation of the shoulder and most develop rotator cuff strain from this subluxation. Pain is appreciated during the acceleration stage, and it is described over the deltoid area and posterior.

On examination, rarely is there muscle atrophy. Pain is exacerbated by abduction of the arm against resistance, particularly in a neutral or slightly internally rotated position. In the older patient, impingement and cuff tears and acromioclavicular joint degeneration are more commonly seen. In impingement, usually slight forward flexion of the arm and internal rotation will exacerbate the pain and abduction in the pouring position is quite uncomfortable. X-rays and MRI are supportive only of the clinical impression and not diagnostic in themselves. Treatment is rest from the inciting factors, particularly overhead and serve. Heat, followed by ultrasound, EGS to the shoulder musculature, N'SAIDs and then a rotator cuff strengthening program, again stressing progressive resistive exercises, short of discomfort.

Impingement and cuff tears and acromioclavicular joint degeneration are most commonly seen in the older patient.

The primary muscles used in the serve are the pectoralis, subscapularis, and serratus anterior, so strengthening of these muscles is

stressed. We usually start with internal and external rotation and strengthening exercises at waist level and slowly progress to the fully abducted position. Next, machines are used that reproduce a throwing motion in the end stages of the rehab. This helps the player gain confidence in the shoulder for return to play. Cortisone injections are rarely indicated and in most situations result in more negative than positive results.

The Knee

Patella tendinitis is another chronic aggravating disorder to the tennis player. The quick stops and changing directions on a "tacky" surface is the etiologic factor. I doubt that it would be a very common occurrence in tennis if we hadn't made the transition from clay and composition courts to the hard surfaces and removed the graceful slide on the tennis stroke from the game.

A micro tear of the tendon fiber occurs and the same concept applies here as with epicondylitis. There is usually some atrophy of the quadriceps mechanism if it has been longstanding, but this isn't easily observed. Not infrequently, poor tracking of the patella and mild chondromalacia are seen. There is point tenderness generally over the mid-portion of the patella tendon and occasionally over the origin or insertion. Soft tissue swelling about the area is seen after play or in the more acute cases.

X-rays are usually normal, but occasionally show rarefaction in the distal pole of the patella. Stretching of the quadriceps mechanism, strengthening of the tendon by isometric exercises and subsequently dynamic resistive exercises, short of pain, must be emphasized. The average athlete wants to lift as much weight as quickly as s/he can, and this approach will result only in further damage and aggravation of the condition. The use of N'SAIDs and occasionally ultra-

sound, EGS, and rarely some cortisone cream with the ultrasound are helpful in getting them started into their program.

I have had very little success with the constraining strap in patella tendinitis. I do not employ a steroid injection about the patella tendon. Warming up the quadriceps mechanism and tendon, with exercises and heat prior to playing and icing following the activity, is also helpful.

I have had very little success with the constraining strap in patella tendinitis. I do not employ a steroid injection about the patella tendon.

Other derangements of the knee are most commonly related to the patella and patellofemoral tracking problems, in particular subluxation of the patella and chondromalacia patella. This condition usually eliminates the individual from high level competition and is more commonly seen in the recreational athlete. The pain is usually diffuse, anterior and parapatella in location. The patient will describe popping, but this is in fact crepitance. Pain occurs both on weight bearing and at rest. Often these patients have difficulty descending stairs.

On physical examination, patients exhibit crepitance under the patella with extension against resistance. Quite often will say that this is the pop that they hear. They frequently demonstrate poor tracking of the patella, with lateral subluxation of the patella on terminal extension. There is exquisite tenderness under the medial facet of the patella and often at the inferior pole. Treatment is designed toward

relieving some of the irritation and strengthening of the extensor mechanism. Again, the N'SAIDs are used for a week to 10 days and periodically thereafter if symptoms exacerbate with activity.

Isometric exercises are performed with the patient sitting, pushing one leg against the other for an 8-second contracture, using the quad on one leg and a hamstring on the other. Patients may try various angles to see if they can find a position of comfort for their isometrics. Fifteen to twenty repetitions, two or three times a day is desirable, more if possible. As they become more comfortable, progressive resistive exercises with straight leg raise working up to about 5 pounds, with 10-15 repetitions, three or four times a session are used at least a couple of times a day. Short arc, dynamic resistive exercises seem to cause pain for the patient and are not a great deal of help. Closed chain quadriceps PREs are frequently tolerated as the patient improves in the program.

I advise my chondromalacic patients to go through a trial of stationary cycling. Many are improved by the cycling program, but occasionally a patient will find it too painful. It is very hard to do anything surgically that will give any longstanding improvement. I reserve arthroscopy in chondromalacia patella only for those individuals who have recurrent effusion, or are in a position where they can't diminish or curtail their sport or activity. Re-alignment procedures have no place in these individuals. The demand of the sport is too great to expect these to be of any success.

Meniscal injuries do occur, mainly in the middle-aged athlete and rarely in the young. Usually they have an acute onset associated with a twist. Pain is localized to the medial or lateral jointline. They may describe a clunk or a pop, quite different from the chondromalacic patient if care-

fully questioned. Some will describe frank locking.

On physical examination, there is tenderness over the involved meniscus. One can usually elicit a pop or a bit of a grind on the McMurray test, particularly with the opposite hand over the involved jointline. Routine x-rays are usually normal and are used to exclude osteochondritis or bony abnormalities, but weight bearing films in the middle-aged or older player show narrowing of the joint space, and these are commonly associated with degenerative tears. MRI scan is expensive and rarely needed, but can be helpful if one is in doubt.

The individual with recurrent ankle sprains is placed on a vigorous long-term program of peroneal strengthening, both isometrically and dynamically.

Treatment consists of arthroscopic removal of the tear, then one must stress rehabilitation of the musculature prior to return to play. Almost always, when the history has lasted more than several months, they will show quadriceps atrophy.

Another common injury seen in the middle-aged tennis player is a tear of the medial head of the gastroc muscle at the musculotendinous junction. I have witnessed at least a half dozen of these in my 30 years of playing tennis. One feels a sharp pain in the posterior medial gastroc, usually when accelerating to one side or the other. Often, the individual looks back to see if a ball from another court hasn't struck him in the back of the leg.

Point tenderness over the musculotendinous junction, followed by soft tissue swelling and difficulty in

push-off, occur. As time passes one can often palpate a defect in the area where the muscle is pulled free. No long-term sequelae occur from this. It is usually 2 weeks before the patient can walk comfortably and a month to 6 weeks before return to play.

Treatment includes ice over the area initially, with a mild compressive bandage, elevation at night, and gentle passive stretching of the gastroc soleus group. The patient can usually begin isometric exercises at a week to 10 days, with progression from two-footed tip-toe exercises to exercises on the effected side alone. When the individual is able to jump on the tip-toe, return to play is allowed.

Low Back Pain

Low back pain is another common problem in tennis; in the absence of congenital weakening, it is usually associated with hyperextension of the back on the serve and overhead. Frank disc herniation is rare in the young age group but becomes more common in the middle-aged and older player. Most commonly, however, it is an acute low back strain or sprain. The pain is localized to the lumbosacral area, occasionally radiates out into the sacroiliac area and rarely into the hamstrings. Limitation of motion, particularly lateral bend and forward flexion and marked exacerbation of pain on hyperextension, is usually found.

Neurologic examination is usually normal, other than a positive straight leg raise for back pain. Physical therapy, consisting of ultrasound, EGS, and heat are used early in treatment. These patients usually have tight hamstrings. I start them on a flexibility program early and then progress to the McKenzie and Williams' exercises. The Nautilus machines to strengthen the trunk and abdominal muscles are used before return to play. Often I will use a Spenco or Sorbothane insert to lessen shock on the hard

courts and NSAIDs and muscle relaxants are occasionally used during the first week.

It is simply a matter of time before they get better. Muscles are better in 3-4 days and the ligaments usually take 2-3 weeks. MRI has been of considerable benefit as a non-invasive way of gaining more information for the patient with the occasional disc herniation, but this simply confirms what one finds clinically. Treatment in my hands is almost always conservative, and surgical approach is beyond the scope of this paper.

Ankle Injuries

Ankle injuries are extremely common and consist predominantly of sprains of the lateral col-

lateral ligament complex, which most commonly is anterior tibia, fibular, and the anterior talofibular ligaments. On-court injuries are generally mild. The patient presents with swelling and tenderness over the anterior lateral aspect of the ankle. Usually, there is no tenderness over the deltoid, but when there is, it is usually posterior medial and usually signifies a more serious injury and therefore, more lengthy recovery. X-rays are obtained, mainly to exclude chip fractures or a fracture of the lateral malleolus. I have not found stress films to be appealing.

We use ice, compression, elevation, and ambulation, so crutches are rarely used. An aircast is helpful in getting early weight bearing. The

high level athlete is never allowed out of compressive taping, except for brief examination and treatment, consequently, he never gets any significant swelling. This is the reason for early return to play. We use early chryotherapy, compression and after 24-48 hours, EGS, ultrasound, contrast baths, range of motion exercises, and isometric exercises, with stress on the peroneals. At the time they return to play, they are usually protected with tape, or either a Sweedo ankle support. The individual with recurrent ankle sprains is placed on a vigorous long-term program of peroneal strengthening, both isometrically and dynamically. This has been found to almost eliminate future ankle sprains in the sport of tennis.

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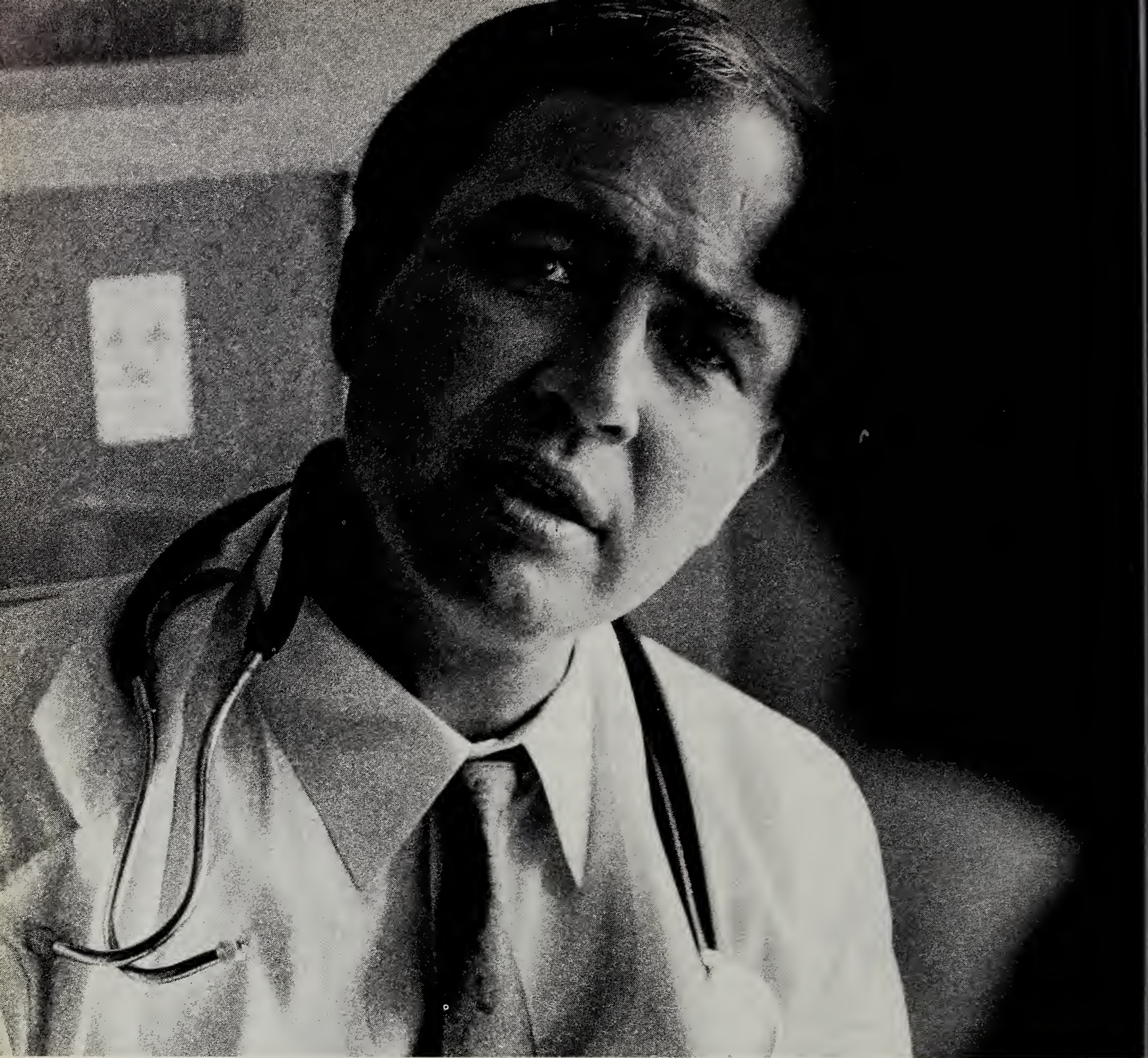
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Spine Injury in Sports

David F. Apple, MD

SPINE INJURY is a potentially serious problem in organized "collision sports" such as football, rugby, hockey, and wrestling. The injury is similarly serious in recreational sporting activity such as diving, horseback riding, and skiing. In fact, from 1975 to 1992, the overwhelming serious cause of spinal cord injury at Shepherd Spinal Center was diving, representing 77% of 250 paralyzing sports-related injuries.

Physicians who are involved with medical management of any organized sports team or care for the "weekend athlete" or the fitness attuned population must be knowledgeable in the recognition and care of spine injury. The injury may be to the muscles, ligaments, disc, bones, or neural tissue. These injuries may be minor as in a strain, major as in a fracture, or in the gray zone such as a "stinger." Management starts at the point of injury and sees the athlete back to activity. Many would argue that management actually starts pre-injury with education on prevention.

Physicians who are involved with medical management of any organized sports team or care for the "weekend athlete" or the fitness attuned population must be knowledgeable in the recognition and care of spine injury.

Injury Site Management

The trainer or paramedic¹ as well as the physician must remember that an unconscious athlete must be treated as if a spinal injury has taken place until proven otherwise. Thus, a spine board for general spine management as well as a cervical immobilization device should be available at collision sports ven-

ues. Cervical collars, sand bags, and straps are required. The athlete should be kept in skeletal alignment and moved "as a log" either by rolling or using a three or four-man lift with the head under control at all times.

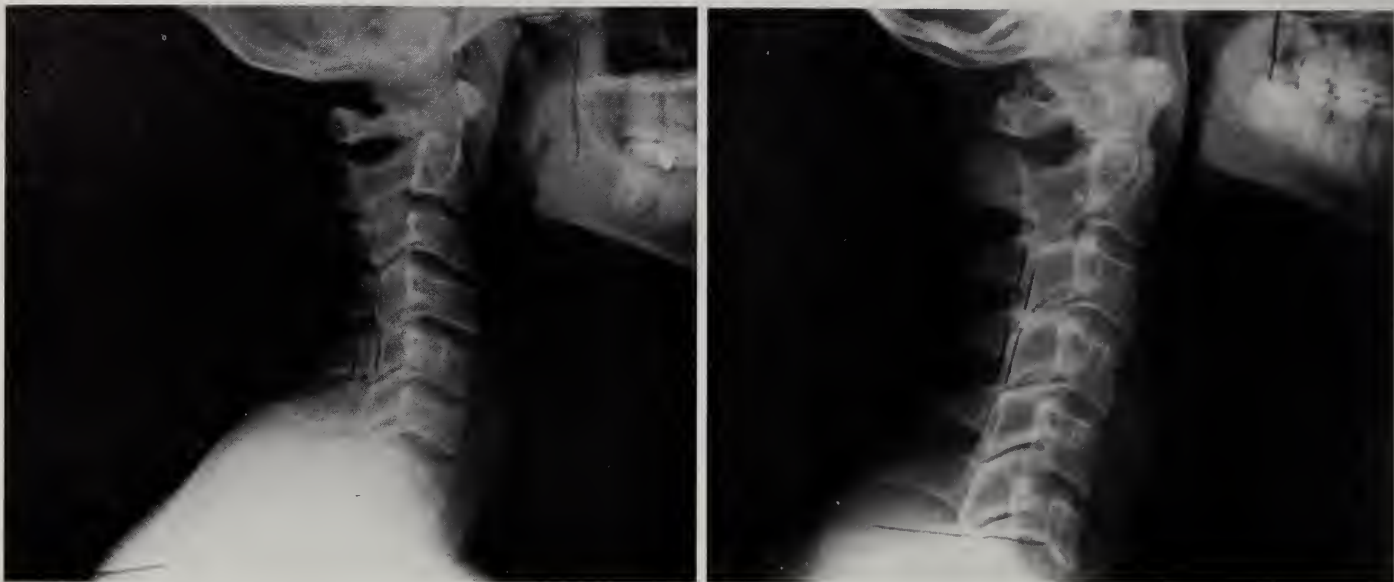
If the athlete is awake, skeletal alignment should be maintained. Even if the athlete complains only of leg pain or numbness, a cervical injury is not precluded. No attempt should be made to remove protective gear such as helmets or pads. If the player complains of transient numbness or radiating pain, these same precautions should be exercised until the player has been removed to an adequate examining area and a thorough, relaxed examination has taken place. This exam should lead to a clearance for return to play or to a need for more extensive evaluation.

Minor Injury

Strain/Sprain

These terms are frequently, but incorrectly, used synonymously. A strain is an injury to a muscle-tendon unit, whereas a sprain is a liga-

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Figures 1 and 2 - (Left) "Normal" distance between spinal laminar line and facet border; (Right) Narrowed distance with spinal stenosis. (For practice determine Pavlov ratio)

mentous injury. Thus, a sprain injury in the most severe (3rd degree) form may mean spinal instability. Both these types of injuries often present similarly.

Strains of the cervical and lumbar area are the most frequent spine injuries in sports. They present as local pain commencing at the time of injury. The pain may initially last for only several minutes, allowing the player to continue, but as bleeding and swelling ensue, tenderness develops, reaching a peak in several hours. Initial treatment is ice and rest, followed by anti-inflammatory and analgesic medication.

A sprain may initially look like a strain. There may be radiation of pain along contiguous muscle groups. Limitation of motion, loss of normal kyphosis, or lordosis may be present. If ligamentous disruption is extensive, instability with or without neurologic symptoms may be present. Thus, routine roentgenograms with flexion-extension views may be necessary, especially in cervical problems. Treatment consists of immobilization, anti-inflammatories, ice, heat, and massage. Return to activity is allowed

when motion is full and pain is gone.

Gray Zone Injury

Stingers

Stingers (burners) are neuropraxic injuries to the cervical neural elements. Whether the injury is to the cervical cord or the brachial plexus is controversial. The syndrome presents as burning pain often associated with numbness and tingling from the shoulder to the hand. Neck pain is not a part of the

syndrome which helps diagnostically to separate this problem from that of a rarely occurring disc rupture. Most frequently, the 5th and 6th nerve roots are involved and occasionally weakness of the appropriate muscle group is seen.

Recovery is usually spontaneous. When it is not, the injury is graded thusly:²

Grade I — Motor and sensory returns fully after several minutes;

Grade II — Weakness of deltoid, biceps, supra, and infraspinatus lasts 3 weeks and clears by 6 months;

Grade III — Deficits lasts more than 1 year, with EMG changes noted.

Treatment is discontinuance of further contact pending clearance of all neurologic symptoms. If this occurs on the field, the player may be allowed to return to the game. If not, the player is restricted from play. If the symptoms last several weeks, roentgenograms and EMG should be obtained. The player can prevent this problem by muscle strengthening, maintenance of good head and neck position, which may be assisted by neck rolls.

An unconscious athlete must be treated as if a spinal injury has taken place until proven otherwise. Thus, a spine board and cervical immobilization device should be available at collision sports venues.

Transient Paresis

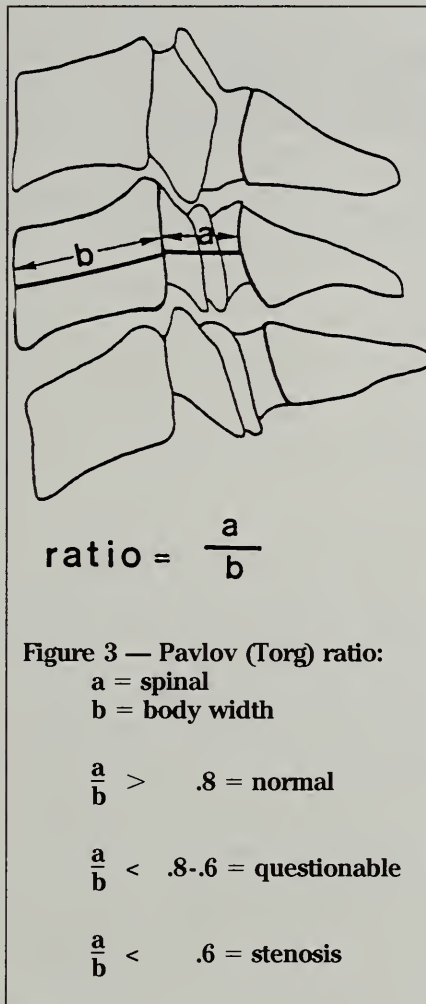
Weakness of the upper and lower extremities individually or in combination deserves further investigation, especially if it persists for more than 24 hours. A player, usually in football, but possibly rugby or wrestling, who sustains a hyperflexion, hyperextension, or axial loading injury is most susceptible, especially if there is associated spinal stenosis. The player may experience a burning pain, numbness, or tingling but the predominant finding is multi-extremity weakness. The initial episode usually clears within 15-30 minutes and may go unmentioned by the player. Subsequent episodes may last longer.

Any episode of quadriparesis indicates a cord problem and deserves further study. Certainly prolonged or repetitive episodes require restriction of sports activity until a full clinical evaluation determines the etiology. Predominant causes are congenital or acquired spinal canal stenosis, disc disease, occult fracture, or instability.

The diagnostic work up starts with routine anterior, posterior, and lateral spine roentgenograms which usually are interpreted as normal. However, stenosis may be suspected if the spinal laminar line is close to the posterior facet margins (Figures 1 and 2). By measuring the Pavlov (Torg) ratio relative stenosis can be inferred (Figure 3).

Computerized tomography (CT) will document more accurately canal size. If the canal is less than 12 mm in diameter, there is mild risk but if less than 10 mm,³ the risk is high, and play should be disallowed. Magnetic resonance imaging (MRI)⁷ best evaluates the soft tissues and thus will indicate the degree of cord compression and also assess disc problems. Similar but not as accurate information can be obtained by CT combined with a metrizamide myelogram.

A stenotic canal, that is less than 1 cm, is an absolute indication for



non participation in collision sports. A relative stenotic canal, 1 cm to 14 mm, is not but must be considered along with other aspects such as spinal instability, and the number, frequency, and severity of quadriparetic episodes.

Major Injury

Major injuries are defined as those which disrupt tissue elements. Fractures, fracture-dislocation, and dislocations all indicate significant force with the possible end result being paralysis. These injuries can occur with flexion, hyperextension, axial loading, torsion, or compression, and any combinations of these forces.

Fractures/Fracture Dislocations

Fractures can be simple and not career threatening, such as a spi-

nous process fracture. Unfortunately, most fractures are more complicated, involving the vertebral body or the facet joints or the lamina or combinations of the three columns. If the fractures are non displaced, treatment by immobilization may suffice, and the player will remain able to participate in a collision sport after healing. However, if the fracture is displaced and requires surgery for realignment and stabilization, collision sports should be discontinued. In non-collision sports such as horseback riding, even a major fracture treated with internal fixation and fusion will not pre-empt participating again.

Dislocations/Subluxations

Dislocation of vertebra so that the facet joints of one vertebra are displaced relative to the contiguous vertebra indicate a complete disruption of ligamentous tissue. A subluxation is a lesser form of this injury causing the ligaments to be stretched. With dislocation, the facet joints often can be relocated without surgery and the ligaments allowed to heal by scarring. However, the healing frequently leads to a chronic subluxation similar to the traumatic subluxation. Both scenarios are potentially risky for the collision sport participant. The criteria for instability have been determined to be more than 11° of cervical vertebral motion or excursion of the facet joints creating more than 3.5 mm of translation on flexion views. If the player requires stabilization surgery, the spinal motion is compromised sufficiently to make collision sports inadvisable.

Disc Disruption

Isolated disc disruption is rare but does occur. Initially, the acute episode may be confused with a "burner." The differing point is the presence of significant neck pain with disc rupture and absence with a "burner." An acute disc rupture is potentially a dangerous problem.

**Table 1 — Cases of Sports-related Paralysis,
Shepherd Spinal Clinic, Atlanta, 1976-1991**

Diving	195
Football	14
Rugby	6
Basketball	4
Horseback	4
Climbing	3
Wrestling	2
Trampoline	2
Skiing	2
Miscellaneous	4
TOTAL	250

The player should not be allowed to participate in sports activity. The most definitive evaluation at this time is an MRI. If proven, then disc excision is required. Following lumbar surgery, most players can resume play; however, if the disc is cervical, collision sports players may be at risk but probably can resume with use of appropriate equipment.

A strain is an injury to a muscle-tendon unit, whereas a sprain is a ligamentous injury. Thus, a sprain injury in the most severe form may mean spinal instability.

Paralysis

Between 1976 and 1991, 250 patients were treated at Shepherd Spinal Center for sports related paralysis (Table 1). Ninety four percent were quadriplegic from cervical injuries. Only one patient, quadriplegic from a baseball injury, recovered to near normal state. The majority were diving related accidents, but 8% were from collision sports resulting in permanent paralysis.

Thoracic/Lumbar Injuries

In the foregoing, mention was made of lumbar injuries but most of the discussion has dealt with the cervical injuries because of higher frequency and more severe sequelae. Thoracic level injuries are infrequent. Lumbar problems occur often, most commonly presenting as low back pain. Age is an important consideration. The younger athlete is more likely to develop lumbar stress fractures especially if engaging in weight lifting. Spondylolysis and spondylolisthesis occur in about 6% of young people. They also may have cartilage problems such as Scheuerman's or Keumils diseases.

In the mature athlete, a lumbar sprain is a frequent cause of pain. If there is concomitant leg pain or numbness and/or weakness, a disc problem should be suspected. Treatment initially is restriction of activity, analgesics, anti-inflammatory agents, and muscle relaxants. With resolution of the pain, back and abdominal muscle strengthening and flexibility is necessary.

In the collision sports, peripheral nerve injuries must be suspected. These can be diagnosed by EMG. Treatment usually is restriction of activity allowing time for the nerve to recover which usually happens.

Prevention

Preventing spine-related sports

injuries can be addressed on two levels. One, an analysis of the injury cause can lead to injury reduction. In 1971, the National Football Head and Neck Registry⁴ was established. Results obtained from registry information lead to rules changes, largely banning spearing in 1976. The following year, the number of cervical quadriplegia cases dropped from 34 to 18. A recent study in hockey players⁵ indicates helmet design may help reduce neck injuries, but has not caused any modifications yet.

Stingers present as burning pain often associated with numbness and tingling from the shoulder to the hand.

The second area of prevention commences with the athlete getting proper muscle conditioning. Participants in football, rugby, and wrestling should strengthen paracervical muscle groups, both anterior and posterior, as well as lumbar and abdominal muscles. Flexibility should be encouraged but only if there is sufficient strength to control the flexibility. Finally, the athlete needs to use proper equipment and to practice good technique for the sport. This aspect has significant coaching implications.

Rehabilitation

Following injury, no matter the degree of severity, it is the physician's responsibility to direct the player's program to return the player to the level of participation enjoyed at the time of injury. Often this starts while the injury is running its course by involving the athlete in alternative exercise endeavors. Occasionally, because of the degree of injury, this may not be possi-

ble, such as in paralysis. The treating physician should obtain the appropriate consultations to help the player regain maximum function and until that occurs, the job is not complete.

The criteria for instability have been determined to be more than 11 degrees of cervical vertebral motion or excursion of the facet joints, creating more than 3.5 mm of translation on flexion views.

References

1. Athletic Training and Sports Medicine, Chicago, AAOS.
2. Clancy W, Brand R, Bergfield J. Upper trunk brachial plexus injuries in contact sport. *Am J Sports Med* 1977;5:209.
3. Walkins R. Neck Injuries in Football Players, *Clinics in Sports Med* 1986; 5:245.
4. Torg J, Vegso J, Sennett B, Das M. The national football head and neck injury registry. *JAMA* 1985;254(24):3439-43.
5. Wells R, Bishop P. Neck loads during head first collisions in fee hockey: Experimental and simulation results. *Internatl J Sports Biomechan* 1987;3.
6. The national football head and neck injury registry. *JAMA* 1985;254(24):3439-3443.
7. White A, Johnson R, Panjob M, et al. Biomechanical analysis of clinical stability in the cervical spine. *Clin Orth* 1975;109:85-96.
8. Schnebel B, Kingston S, Watkin R, Dillon W. Comparison of MRI to contrast CT in the diagnosis of spinal stenosis. *Spine* 1989;14(3):332-7.



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From the Georgia Medical Care Foundation:

“Premature Discharge” As a Peer Review Concept

Matt Burns, MD, Dan Burge, MD

THE PHRASE “premature discharge from the hospital” implies discharge occurring before the medically appropriate time. This “dictionary meaning” is only a part of the definition as used by the Georgia Medical Care Foundation (GMCF) and all PROs that have contracts with the Health Care Financing Administration (HCFA). The technical definition includes the contention that the discharge before the medically appropriate time has resulted in the need for readmission within a 30-day period. Such a premature discharge is said to have resulted in “significant harm to the patient” — the significant harm being the need to be readmitted to the hospital.

When a premature discharge is determined, the hospital is not paid for the readmission, unless the readmission was to a different hospital. This denial of payment is unrelated to the nature of severity of the patient’s clinical status but is based on the contention that the admission was occasioned by medical instability at the time of the previous discharge. If the readmitting physi-

The technical definition of “premature discharge” includes the contention that the discharge before the medically appropriate time has resulted in the need for readmission within a 30-day period.

cian is not the original admitting doctor, he or she will receive notification of payment denial to the hospital. Of course, there is no *quality* issue based on the premature discharge raised with that new physician.

There are many possible causes for early readmission that are *not* due to premature discharge. Some patients are chronically unstable, and their frequent admis-

sions are inevitable. Bronchial asthma, COPD, sickle cell disease, and brittle diabetes are examples of conditions often associated with chronic instability. An intercurrent clinical event may force readmission, such as myocardial infarction (MI). A patient just discharged after stabilization of congestive heart failure may have to be readmitted with an exacerbation which was precipitated by an acute MI, painless or otherwise. Early readmissions are sometimes occasioned by failure of the patient to comply with discharge instructions. If the readmission is thought to be due to non-compliance by the patient and/or family, it becomes extremely important to implement and document careful discharge planning designed to prevent *another* readmission due to non-compliance. It is important in dictating the discharge summary to emphasize the evidences of medical stability at the time of discharge, for example, vital signs, lab studies, and x-ray abnormalities which have turned to or toward normal, the patient’s ability to eat and retain food and fluids,

Dr. Burns is Medical Director, and Dr. Burge is Associate Medical Director — Quality, for the Georgia Medical Care Foundation.

the clearing of pain. It is particularly important to include such points if the patient is chronically unstable or poorly compliant.

In all cases of early readmission, it behooves the attending physician to document specifically in the medical record all factors which explain the need for the readmission.

Occasionally, we see records which suggest that the patient was unstable on discharge, but the readmission was not due to that instability. In such cases, we would indicate in our letter that the quality issues had the *potential* for significant harm to the patient, but there would be no denial of payment for the readmission.

As with all GMCF letters citing apparent quality of care issues,

Well over half of apparent "premature discharge" citations are reversed. Hence, it is very important that initial letters be answered to insure a second review. Letter should include all information which would show that the readmission was due to factors other than instability on discharge from the first admission.

those pertaining to apparent premature discharge should be answered promptly. The letter should include all information which would show that the readmission was due to factors other than instability on discharge from the first admission. On receipt of such a letter, the case and the letter would go to a second reviewer for reconsideration. Without a reply from the attending physician, the issues raised would be regarded as facts, and no second review would be obtained. Well over half of apparent "premature discharge" citations are reversed. Hence, it is very important that initial letters be answered to insure a second review.

Good documentation in the hospital record will prevent a large portion of the premature discharge inquiries from GMCF.

Maxillofacial Prosthodontics: An Aid to The Oncology Patient

Frederick A. Skinner, DDS

THE AMERICAN Cancer Society has estimated that 21,900 new oral cancers were seen in the United States in 1989. This constitutes approximately 4% of cancers in men and 2% in women. In the same year, there was estimated to be 4,650 deaths from oral cancer.¹ Although the disease constitutes only a small portion of human cancer in the United States, its morbidity and mortality is significant.

The prognosis of oral cancer is directly related to the stage of the disease when first treated, so it is imperative that all primary care physicians and dentists recognize the precursors and early oral cancer stages to institute proper investigation and treatment.^{2,3} This demands careful examination, including inspection and palpation of the oral structures and the cervical lymph nodes at regular intervals in all patients, especially in those who are high risk, i.e., smokers, alcoholics, and those with familial risks for cancer. Early oral cancer is usually asymptomatic. It is eminently treatable by several methods, but all too often it is unrecognized. Therefore, treatment is delayed until the cancer is morbid, large, and has spread to cervical lymph nodes.

The demand for maxillofacial prosthodontic devices for the rehabilitation of patients with post-surgical defects has intensified in recent years. As surgical and radiation treatment procedures become in-

‘Maxillofacial prosthetic rehabilitation of the oncology patient must encompass all knowledge pertaining to the etiology, diagnosis, treatment, and rehabilitation of the head and neck patient. The prosthodontist, as a member of this team, is a critical link in enhancing the quality of life for the oncologic patient.’

creasingly sophisticated and effective, we can expect cancer cure rates will increase. The extensive surgical procedures necessary to eradicate cancer of the head and neck often leave extremely large physical defects which present almost insurmountable difficulties in restoring acceptable function or esthetics.

Send reprint requests to Dr. Skinner at 6500 Vernon Woods Dr., Atlanta, GA 30328. This article was prepared at the request of the American Cancer Society, Georgia Division.

Despite remarkable advance in surgical management of oral and facial defects, many such defects, especially those involving the eyes and ears, cannot be satisfactorily repaired by plastic surgery alone. Further, the increased life span of the population and the growing demand for health care services places additional obligations on the dental profession to provide trained maxillofacial prosthodontists. Many recent developments in prostheses fabrication and polymer research have enabled the maxillofacial prosthodontist to aid cancer patients in resuming a more normal lifestyle.

Jaw defects affect many vital functions, i.e., respiration, deglutition, speech, and mastication. Ideally, any anatomic defect should be surgically reconstructed. However, when surgical reconstruction is contraindicated, prostheses must be employed to restore anatomy, function, and aesthetics.⁴ Conventional prostheses were designed to be inserted as single-unit structures and in the majority of instances will satisfactorily alleviate the debilitating results of surgical intervention. Extensive anatomic defects and oftentimes the patient's diminished neuromusculature adaptability, however, may preclude acceptance of this type of traditionally designed prostheses.

Sectional and sequential prosthetic designs offer an acceptable

solution for the restoration of large, complex maxillofacial defects. Some of the appliances that the prosthodontist can provide for the oncology patient are: surgical stents, radiation carriers, radiation shields, intraoral cone stents, palatal augmentation prostheses for the glossectomy patient, immediate transitional and definitive prostheses to replace lost body structures, extraoral prostheses to replace ears, nose, and facial defects, and facial moulages for diagnostic purposes.

‘Many recent developments in prostheses fabrication and polymer research have enabled the maxillofacial prosthodontist to aid cancer patients in resuming a more normal lifestyle.’

Although radiation prostheses are not commonly used, they are relatively simple to fabricate by the maxillofacial prosthodontist and can be very effective in facilitating radiation therapy. Their function includes placing the pathologic tissue in a repeatable position for

daily therapy, protecting non-pathologic tissues by shielding and/or positioning them outside the treatment field. Use of these relatively simple and inexpensive prostheses are extremely beneficial in reducing the morbidity of xerostomia, radiation caries, mucositis, and osteoradionecrosis.

When a maxillary resection is planned, an immediate surgical obturator prosthesis is fabricated from presurgical impressions. The surgical prosthesis is inserted at the time of surgery after modifications to the prosthesis with autopolymerizing soft denture liners for a more accurate fit. The patient is thus able to take food normally by mouth, eliminating the need for a nasogastric tube. Firm contact of the nasal extension of the obturator prostheses against the skin graft aids in preventing hemorrhage, hematoma formation, post-surgical infection, graft failures and generally promotes healing. Relatively normal speech is restored immediately, and the emotional and psychological well-being of the patient is vastly improved.

Rehabilitation after partial or complete glossectomy may include fabrication of a prostheses with a palatal extension to allow normal deglutition, speech and mastication.

Maxillofacial prosthetic rehabilitation of the oncology patient must encompass all knowledge pertaining to the etiology, diagnosis,

treatment, and rehabilitation of the head and neck patient. In order to provide them with optimum treatment, a team approach is manda-

‘Although radiation prostheses are not commonly used, they are relatively simple to fabricate by the maxillofacial prosthodontist and can be very effective in facilitating radiation therapy.’

tory. This includes the oncologist, head and neck surgeon, plastic surgeon, radiotherapist, chemotherapist, prosthodontist, speech pathologist, social worker, and psychotherapist. The prosthodontist, as a member of this team, is a critical link in enhancing the quality of life for the oncologic patient.

References

1. Silverberg E. Lubera J. Cancer Statistics 1989. CAA J for Clins 1989; 39:3.
2. Masberg A. Morrissey J. Garfinkel L. A study of the appearance of early asymptomatic oral squamous cell carcinoma. Cancer 1973;32:1436.
3. WHO Collaborating Center for Oral Precancerous Lesions: Definition of leukoplakia and related lesions. An aid to studies on oral precancer. Oral Surg 1978;46:518.
4. The Dental Clinics of North Am 1990;34:2.
5. Chalian, Drane & Standish, Maxillofacial Prosthodontics, Williams and Wilkins Co, Baltimore 1971.

Controlling the Spread of AIDS Confidential Information

Philip M. Rees

AFTER WORK on the day I was asked to write an article for the *Journal*, I struggled to find a topic related to this month's sports theme. Thinking I was too tired to complete this task, I turned on the television to watch the evening news. I was quickly handed my topic — an obvious example of sports and medicine intersecting. The top story that night was the tragic announcement that Arthur Ashe — who is, as most of you may know, a well-known tennis star — was infected with the HIV virus and possibly suffered from AIDS. Only a few months before, several of us sat quietly around our conference room table and watched the press conference of basketball superstar Earvin "Magic" Johnson, as he announced to the world that he had contracted the HIV virus.

Many of the important and interesting issues surrounding AIDS and the HIV virus are focused to some degree by high visibility cases like those of Magic and Arthur Ashe. This month's Legal Page looks at how Georgia law addresses one of those issues — dissemination of AIDS confidential information.

The Official Code of Georgia (the Code) provides numerous reporting rules relating to AIDS confidential information — some events require mandatory reporting; some events allow for discretionary reporting or dissemination; and some types of dissemination are prohibited. The Code also provides for

‘The Code states that AIDS confidential information disclosed or discovered within the patient/physician relationship shall be confidential and shall not be disclosed except as otherwise provided under the law.’

sanctions for improper dissemination and protections for proper dissemination and refusal to disseminate.

Mandatory Reporting to the Department of Human Resources

The Code defines "AIDS confidential information" as information which discloses that a person (i) has been diagnosed as having AIDS; (ii) has been or is being treated for AIDS; (iii) has been determined to be infected with HIV; (iv) has submitted to an HIV test; (v) has had a positive or negative result from an HIV test; (vi) has sought and received counsel regarding AIDS; or (vii) has been de-

termined to be a person at risk of being affected with AIDS; and which permits identification of that person.¹ The Code states that AIDS confidential information disclosed or discovered within the patient/physician relationship *shall be confidential* and shall not be disclosed except as otherwise provided under the law.² However, under the Code, each health care provider (including physicians, limited licensed professionals and allied health professionals, as well as administrative clerical or support personnel, whether or not they are licensed or regulated by the state³), health care facility or any other person or legal entity which orders an HIV test for any person *shall* report each confirmed positive HIV test to the Georgia Department of Human Resources (DHR) along with the age, sex, race and county of residence of the person having the confirmed positive HIV test, but shall include in that report no other identifying characteristics regarding the HIV-infected person unless otherwise authorized or required by law.⁴ Notwithstanding the anonymity which appears to be protected by this part of the statute, the Code goes on to state that when mandatory "nonanonymous" reporting of confirmed positive HIV tests to DHR is determined to be reasonably necessary, DHR shall establish by regulation a date on and after which such reporting shall be required. On and after that date, each

*This article was prepared at the request of the *Journal*. Mr. Rees is an associate in the law firm of Vincent, Chorey, Taylor & Reil, Suite 1700, The Lenox Building, 3399 Peachtree Road, N.E., Atlanta, Georgia 30326. Send reprint requests to Mr. Rees.

health care provider, health care facility, or any other person or legal entity which orders an HIV test for another person *shall* report to DHR *the name and address of any person thereby determined to be infected with HIV.*⁵ (This requirement will not apply to confirmed positive HIV tests provided at any anonymous HIV test site operated by or on behalf of DHR.) As of the writing of this article, DHR had indicated that it would begin to require this "non-anonymous" reporting of confirmed positive HIV tests some time during the summer of 1992.

“Notwithstanding the anonymity which appears to be protected by this statute, the Code goes on to state that when mandatory “nonanonymous” reporting of confirmed positive HIV tests to DHR is determined to be reasonably necessary, DHR shall establish by regulation a date on and after which reporting shall be required.”

Permitted Disclosure

Except as otherwise provided in the Code, no person or legal entity which receives AIDS confidential information or which is responsible for recording or maintaining AIDS confidential information shall (i) intentionally or knowingly disclose that information to another person or legal entity or (ii) be compelled by subpoena, court order, or other judicial process to disclose that in-

formation to another person.⁶ However, this portion of the statute is not the broad prohibition it appears to be because the Code provides numerous exceptions.

Specifically, AIDS confidential information *may be disclosed* in many instances, including (i) to the person identified by that information (or if that person is a minor or an incompetent person, to that person's parent or legal guardian); (ii) to any person or legal entity designated to receive that information when that designation is made in writing by the person identified; (iii) to any agency or department of the federal government, the State of Georgia, or any political subdivision of the State of Georgia, if that information is authorized or required by law to be reported to that agency or department; or (iv) to a person (or that person's designated representative) who ordered such tests of the body fluids or tissue of another person (this section allows a clinical laboratory to report the results of an HIV test to the physician administering the test to the patient).⁷ Moreover, when the patient of a physician has been determined to be infected with HIV and that patient's physician reasonably believes that the spouse or sexual partner or any child of the patient, spouse or sexual partner is a person at risk of being infected with HIV by that patient, the physician *may disclose* to that spouse, sexual partner, or child that the patient has been determined to be infected with HIV, after first attempting to notify the patient that such disclosure is going to be made.⁸

Additionally, any health care provider authorized to order an HIV test may disclose AIDS confidential information regarding a patient if that disclosure is made to a health care provider or health care facility which has provided, is providing, or will provide any health care service to that patient and as

a result either has personnel or patients who may be at risk of being infected with HIV (and provided such disclosure is reasonably necessary to protect such personnel or patient), or the health care provider or health care facility has a legitimate need for that information in order to provide health care service to that patient.⁹ Finally, AIDS confidential information may be disclosed to the extent the person identified by such information (or the heirs, successors, assigns, or beneficiaries of such person) (i) files a claim or claims other entitlements under any insurance policy or benefit plan or is involved in a civil proceeding regarding such claim; (ii) places such person's care, treatment, the nature and extent of his injuries, the extent of his damages, his medical condition, or the reasons for his death at issue in any civil or criminal proceeding; or (iii) is involved in a dispute regarding coverage under any insurance policy or benefit plan.¹⁰

“In light of the sanctions and risk of liability involved for improper disclosure, an understanding of the rights and obligations involved in handling AIDS confidential information is obviously critical for all Georgia physicians and health care facilities.”

When a disclosure of AIDS confidential information is authorized or required to a person at risk of being infected with HIV and that person is a minor or incompetent person, such disclosure may be made to

any parent or legal guardian.¹¹ Additionally, when a disclosure of AIDS confidential information is authorized or required to be made to a physician, health care provider, or legal entity, such a disclosure may be made to the employees of that physician, health care provider, or legal entity who have been designated to receive such information. Moreover, those designated employees may thereafter disclose that information to other employees of that physician, health care provider or legal entity, provided, however, such disclosures among those employees are only authorized when reasonably necessary to carry out the purpose for which the disclosure is authorized or required to be made.¹²

Sanctions for Unauthorized Disclosure

Generally, any person or legal entity which discloses AIDS confidential information without proper authority will be guilty of a misdemeanor¹³ (punishable by a fine not to exceed \$1000 or by confinement in jail for not more than 1 year¹⁴). Additionally, any person or legal entity which discloses AIDS confidential information without

proper authority will be subject to possible civil claims for violations of confidentiality. However, a health care provider, health care facility or other person or legal entity who *unintentionally* discloses AIDS confidential information, notwithstanding the maintenance of procedures which are reasonably adopted to avoid risking such disclosure, will not be civilly or criminally liable unless such disclosure was due to gross negligence or wanton and willful misconduct.¹⁵ Finally, a health care provider or any other person or legal entity authorized or required to disclose AIDS confidential information will have no civil or criminal liability for making such a disclosure and a health care provider or any other person or legal entity authorized *but not required* to disclose AIDS confidential information has no duty to make such a disclosure and will not be liable to a patient or any other person or legal entity for failing to make such a disclosure.

Conclusion

While patient/physician confidentiality is still obviously a very important part of any analysis regarding AIDS confidential informa-

tion, the Georgia Legislature has decided that the severity of the AIDS epidemic requires specialized treatment. The Legislature has taken on the difficult task of expanding the instances in which the patient/physician relationship can (or must) be breached, while at the same time trying to protect the privacy of individuals who are or may be diagnosed as having AIDS or being infected with HIV. In light of the sanctions and risk of liability involved for improper disclosure, an understanding of the rights and obligations involved in handling AIDS confidential information is obviously critical for all Georgia physicians and health care facilities.

Notes

1. O.C.G.A. § 31-22-9.1.
2. O.C.G.A. §24-9-40.1.
3. O.C.G.A. §31-22-9.1 (a)(9).
4. O.C.G.A. §31-22-9.2(b).
5. O.C.G.A. §24-9-47(h)(2).
6. O.C.G.A. §24-9-47(b).
7. O.C.G.A. §24-9-47(c)-(f).
8. O.C.G.A. §24-9-47(g).
9. O.C.G.A. §24-9-47(i).
10. O.C.G.A. §24-9-47(y).
11. O.C.G.A. §24-9-47(k).
12. O.C.G.A. §24-9-47(m).
13. O.C.G.A. §24-9-47(o).
14. O.C.G.A. §17-10-3.
15. O.C.G.A. §24-9-47(u).
16. O.C.G.A. §24-9-47(j).

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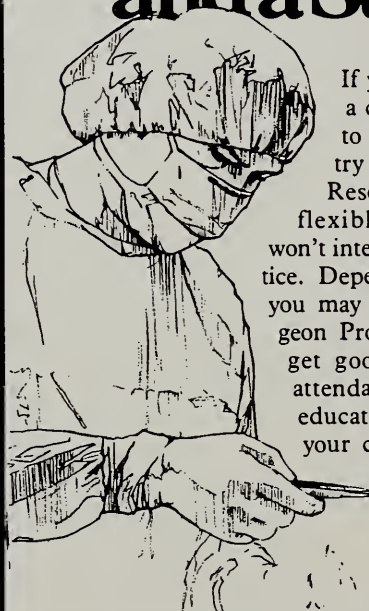
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ADVERTISING INDEX

American Heart Association	292
American Medical Association	276, 296, 306, 322
AuraTech, Inc.	259
Classified Advertisements	336
Council of Biology Editors, Inc.	306
Georgia Hospital Association	288
Health Quip, Inc.	288
Knoll Pharmaceuticals	282A-B
Law and Medicine Seminar	260
Lilly, Eli & Company	300
MAG Mutual Insurance Company	258
Palisades Pharmaceuticals, Inc.	316
Parke Davis	267A-B
Postgraduate Medicine	316
U.S. Air Force	321
U.S. Air Force Reserve	336
U.S. Army	288
U.S. Army Reserve	339
Walton Rehabilitation Hospital	287
Joe Wilder, MD	340

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histamine and eosinophil chemotactic
factor of anaphylaxis during cold chal-
lenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

ILLUSTRATIONS — **Illustrations must be submitted in duplicate.** Illustrations, tables, etc., should bear the author's name and figure number. The cost of reproduction of illustrated material for publication in excess of three average illustrations and/or tables will be borne by the author, and the *Journal* will bill the author for this expense.

GENERAL POLICY — Authors will be given as wide a latitude as the general policy of the *Journal* and the demands on its space permit. The right to reduce, revise, or reject any material submitted for publication is always reserved. The *Journal* is not responsible for statements made by any contributor. All communications regarding editorial, advertising, subscription, and miscellaneous matters should be sent to the Managing Editor, 938 Peachtree Street, N.E., Atlanta, GA 30309-3990.

ADVERTISING — All pharmaceutical advertising must be approved by the State Medical Journal Advertising Bureau, Inc., to be acceptable for publication. Other advertising copy may be accepted subject to the approval of the Editor. All copy or negatives must reach the *Journal* office by the 20th of the month 2 months preceding publication. General and classified advertising rates will be furnished on request.

MEDICAL EDITING SERVICES — If in the opinion of the *Journal* Editorial Board, material submitted for publication could be improved by a Medical Editing Service, the Editor will contact the author for his or her approval. Association members needing assistance in preparation of material for publications may also use this service. A reasonable charge is made for this service and the cost of this will be borne by the author.



Ingrid H. Brunt
President A-MAG 1991-1992

Just A Glimpse

LET'S TAKE A glimpse into the past — the past year that is — to see what the Auxiliary to the Medical Association of Georgia and its county auxiliaries have accomplished.

With more than 2600 auxiliary volunteers around the state working to promote healthy lifestyles and improve the image of medicine, you have to know that a multitude of programs are taking place. Included in this issue of the *MAG Journal* are some projects just kicking off, some in full swing, and others completed.

We are excited about the cover of the *Journal* because it calls attention to the program, "Growing Healthy." This unique program has the potential for touching every child in the state of Georgia. It is comprehensive school health education curriculum for students in K-7th grade and is endorsed by the AMA, MAG, and its auxiliaries. Managed by the National Center for Health Education, "Growing Healthy" promotes students' self-esteem and decision-making skills, enabling them to adopt healthy, responsible attitudes and behaviors. Students participating in this program have been shown to use less alcohol, fewer have tried drugs and significantly fewer smoke tobacco.

Our goal: Let MAG/A-MAG be the sparkplug for medical societies and auxiliaries in Georgia to kick off the

"Growing Healthy" program in their communities. Let the medical community be first in promoting healthy lifestyles for all children. Let us form coalitions with businesses and health-related agencies to make this project a reality. If we start educating children early, maybe we can avert the crisis we have in adolescent health and there is a crisis in adolescent health. Before today's teens graduate from high school:

- 16,000 will die as a result of violence or injury;
- 92% will try alcohol, 50% marijuana, and 15% cocaine;
- 34% will consider suicide, 14% will attempt, 1% will succeed;
- 65% of boys and 51% of girls will be sexually active;
- 11% of teen girls will get pregnant.

These issues are being addressed by auxiliaries all over the United States. At county, state, and national meetings, we attend seminars, share our resources, network with one another, and find ways to attack health concerns such as family violence, teen pregnancy, safety, drug abuse, mammography awareness, and the elderly.

County auxiliaries are busy responding to these concerns in a variety of ways. In order to help support some of our health projects at the state and county level, A-MAG has published *Georgia Land*, a cookbook highlighting recipes, local artwork, and history from every area of the state. A big "thank

you" goes to Mary Ann Marks, editor of *Georgia Land* and her committee that have worked tirelessly for the past 2 years.

A-MAG is also very involved with legislative activities on the county and state level. The counties work at the grass roots level by getting to know their legislators on a personal basis and make every effort to keep them informed. In Atlanta, the Phone Bank is manned by auxiliaries who live within an hour's drive of Atlanta. For 2 1/2 months auxiliaries notified physicians around the state regarding pending legislation and encouraged the physicians to contact their legislators.

If you are a physician spouse and care about health issues, please join us. A commitment of money (dues) helps support worthwhile programs and your commitment of money and time doubles your effectiveness and the effectiveness of our organization. The Auxiliary to the Medical Association of Georgia greatly appreciates the support of MAG and we look forward to continuing to work together in the future for the betterment of medicine.

It has been an honor, privilege, and rare opportunity to serve as President of the Auxiliary to the Medical Association of Georgia for the year 1991-92. I am proud to be a part of such a worthwhile organization. Thank you for letting me serve as your President. This issue is "Just A Glimpse" of Auxiliary involvement. Enjoy!

Doctor's Wife — Doctor's Mother

You'd never think the
 years
 would leave her eyes so
 bright,
 her smile so warm,
 her hair so rich a gray.
 Just where the energy
 she has so constantly
 in reserve
 springs from, you wonder. You
 feel it;
 you know it is there,
 even if you don't see her
 pull a child back from the street,
 or beat the cakes for church
 bazaars,
 help a cripple into a hospital
 chair,
 tell a drunk exactly what she
 thinks —
 or anyone else for that matter —
 no one could have a doubt
 just how she feels on any matter
 unless
 she has a doubt herself.
 Not that she always voices her
 opinions,
 but, if you ask,
 you get a direct answer.
 She believes in direct anything.
 She shows her love
 (or her displeasure, if it is
 deserved)
 and only hides
 her secret generosity.
 If someone is in need
 of food, or faith,
 a strong warm hand,
 money, or advice,
 she is there to help
 (with as much as she has of
 each).

She believes the best of anyone
 without needing
 to have the best believed of her.
 She passes no gossip on,
 but frequently intercedes
 or interposes a
 "But did you know?"
 and gives some bit of good
 or news
 that blunts
 or obliterates
 the point before
 the spear is newly thrown.

She is sensitive to hurts.
 How else could she
 be so sensitive to others'
 needs and moods
 unless she is to her own?
 She never knew an enemy,
 (if they needed help)
 and never called on a friend
 for what she would not do
 twice again for them.

She never could be half-
 appreciated —
 like motors that run smoothly —
 and if hers needed
 high octane thanks
 it would have sputtered out
 long ago.
 Even her own
 will never know how much
 She means until
 it is too late
 to tell her so.

The sun moves slowly overhead,
 and we accept its light,
 hardly noticing
 until it's night.

About the Cover Artist
Lisa Pumphrey



LISA PUMPHREY was born in New Orleans, Louisiana, and raised in Columbus, Ohio. She studied art at The Ohio State University, from which she graduated summa cum laude. She has also studied at the De Young Museum in San Francisco, the Louvre in Paris, and the Mistrik School of Art in Bethesda, MD.

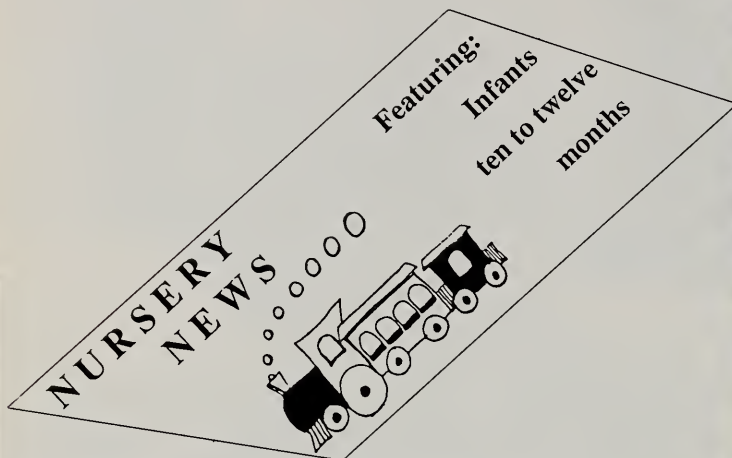
Ms. Pumphrey brings to her canvases a special brand of realistic impressionism. Her subject matter

includes landscapes, seascapes, still lifes, and portraits. Her medium is usually oil or acrylic. Striking composition, economy of detail, and joy of color give her paintings wide appeal. Her paintings hang in many private collections.

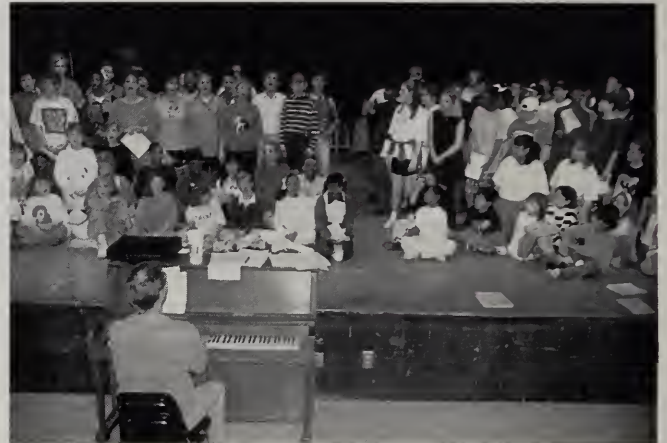
Ms. Pumphrey is married to Dr. Robert Pumphrey, who practices in Washington, DC, and is the brother of Dr. Emmerich von Haam, Jr., of Atlanta.

Auxiliary Community Health

"Just A Glimpse" of Activities Sponsored



Bibb County Auxiliary provides newsletters for new mothers containing a doctor's column and vital information on nutrition, immunizations, safety and child development.



An original musical, "Our Gift of Time," is sponsored by the Hall County Auxiliary, Brenau College and Gainesville City Schools as a benefit for the Pediatric AIDS Foundation.



Auxiliaries continue the Teen Health Forums initially developed in 1988. The Muskogee auxiliary hosted a program for 360 eighth graders in the fall and 1400 students attended the Peachbelt auxiliary forum. Building self-esteem and developing healthy lifestyles through good decision making are the focus.

Projects Span Generations

by Auxilians Throughout Georgia



Preschool children in 17 Whitfield-Murray classes learn the importance of seat belt safety in the BUCKLEBEAR program.



The Auxiliary to the Georgia Medical Society emphasizes the importance of helmets during "Sports Safety Awareness Day — 15.5 Ounces of Prevention."



DeKalb County auxiliary distributed 27,000 copies of Teen Yellow Pages. This directory of services and resources also gives information and helpful hints about driving laws, personal safety, mental health and sexuality.



Richmond County and Whitfield-Murray County auxiliaries participated in the Breast Cancer Awareness campaign by distributing pamphlets and public service announcements.



The Richmond County Auxiliary and medical society provide an opportunity for legislators to be an "Intern for a Day." Dr. Butch Garrison hosts State Representative Dan Cheeks in this grass roots legislative activity.

JULY

16-18 — *Kiawah Island, SC: Update in Gynecology.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

19-24 — *Kiawah Island, SC: Critical Care Medicine.* Category 1 credit. Contact Div. of Continuing Medical Education, Medical College of Georgia, Augusta, GA 30912. PH: 404-721-3967 or 1-800-221-6437.

19-24 — *Crested Butte, CO: Physicians and Their Families.* Category 1 credit. Contact The Menninger Clinic, Division of Continuing Education, P.O. Box 829, Topeka, Kansas 66601-0829. PH: 913-273-9941 or 1-800-288-7377.

20-24 — *Kiawah Island, SC: 14th Annual Critical Care Medicine.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

27-29 — *Kiawah Island, SC: 15th Annual Pediatric Update.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

30-1 Aug. — *Hilton Head Island, SC: Financial Management.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

30-1 Aug. — *Kiawah Island, SC: Seizures, Spells, and Shakes: Neurology for the Non-Neurologist.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

30-2 Aug. — *Hilton Head Island, SC: Adolescent Medicine.* Category 1 credit. Contact Debbie Shealy, SC Chapter AAP, P.O. Box 11188, Columbia, SC 29211. PH: 803-798-6207.

AUGUST

3-8 — *Kiawah Island, SC: Summer Imaging.* Category 1 credit. Contact CME, Emory Univ Sch of Med, 1440 Clifton Rd., 30322. PH: 404-727-5695.

9-14 — *Kiawah Island, SC: Sleep Disorders.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

SEPTEMBER

2-5 — *Atlanta: North American Association For the Study of Obesity.* Category 1 credit. Ritz-Carlton, Buckhead, Contact CME, Emory Univ Sch of Med, 1440 Clifton Rd., 30322. PH: 404-727-5695.

16-18 — *Atlanta: Radiology Symposium.* Category TBD. Contact CME, Emory Univ Sch of Med, 1440 Clifton Rd., 30322. PH: 404-727-5695.

23-25 — *Augusta: 16th Annual Neonatology — The Sick Newborn.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

OCTOBER

1-2 — *Atlanta: Contraception in the Nineties: Norplant, New Poggestines, New Condoms and More.* Category TBD. The Ravina

Crowne Plaza, Contact CME, Emory Univ Sch of Med, 1440 Clifton Rd., 30322. PH: 404-727-5695.

1-3 — *Atlanta: Georgia Chapter of the AAP Fall Meeting.* Category 1 credit. Swiss Hotel, Contact William C. Mankin, 4059 Land O'Lakes Dr., 30326. PH: 404-237-3922.

2-4 — *Atlanta: Anesthesiology.* Hotel Nikko, Contact CME, Emory Univ Sch of Med, 1440 Clifton Rd., 30322. PH: 404-727-5695.

9-11 — *Hilton Head, SC: Frontiers in Nutrition.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

11-15 — *Atlanta: Interventional Radiology for Technologies & Nurses.* Category TBD. Hotel Nikko, Contact CME, Emory Univ Sch of Med, 1440 Clifton Rd., 30322. PH: 404-727-5695.

NOVEMBER

8-12 — *Dallas, TX: Ninety-Sixth Annual Meeting of The American Academy of Ophthalmology.* Category 1 credit. Contact The American Academy of Ophthalmology Meetings Department, P.O. Box 7424, San Francisco, CA 94120-7424. PH: 415-561-8500.

DECEMBER

7-9 — *Atlanta: Nuclear Medicine Update.* Ritz-Carlton, Buckhead, Contact CME, Emory Univ Sch of Med, 1440 Clifton Rd., 30322. PH: 404-727-5695.

Of the Seasons of Our Lives

Charles R. Underwood, M.D.

IT WAS WHILE contemplating the upcoming summer that I came across in my reading a small volume published in 1903 by a little known English author by the name of Erskine Childers and titled *The Riddle of the Sands*. The book describes a voyage of two young Englishmen on a small yacht in and about the German coast fronting on the North Sea. It is said to have alerted the English to the possibility of invasion of the Island by Germany from those unexpected coastal waters. The book begins with a description of the work and office-bound young man who tells the story.

"I have read of men who, when forced by their calling to live for long periods in utter solitude — save for a few black faces — have made it a rule to dress regularly for dinner in order to maintain their self-respect and to prevent a relapse into barbarism. It was in some such spirit, with an added touch of selfconsciousness, that, at seven o'clock in the evening of September 23rd in a recent year, I was making my evening toilet in my chambers in Pall Mall. I thought the date and the place justified the parallel; to my advantage even; for the obscure Burmese administrator might well be a man of blunted sensibilities and coarse fibre, and at least he is alone with nature, while I — well, a young man of condition and fashion, who knows the right people, belongs to the right clubs, has a safe, possibly

a brilliant, future in the Foreign Office — may be excused for a sense of complacent martyrdom, when, with his keen appreciation of the social calendar, he is doomed to the outer solitude of London in September. I say 'martyrdom,' but in fact the case was infinitely worse. For to feel oneself a martyr, as everybody knows, is a pleasureable thing, and the true tragedy of my position was that I had passed that stage. I had enjoyed what sweets it had to offer in ever dwindling degree since the middle of August, when ties were still fresh and sympathy abundant. Lady Ashleigh herself had said so in the kindest possible manner, when she wrote to acknowledge the letter in which I explained, with an effectively austere reserve of language, that circumstances compelled me to remain at my office. "We know how busy you must be just now," she wrote, "and I do hope you won't overwork; we shall all miss you very much." Friend after friend 'got away' to sport and fresh air, with promises to write and chaffing condolences, and as each deserted the sinking ship, I took grim delight in my misery, positively almost enjoying the first week or two after my world had been finally dissipated to the four bracing winds of heaven. . . .

By the first week in September I had abandoned all palliatives, and had settled into the dismal but dignified routine of office, club, and chambers. And now came the most cruel

trial, for the hideous truth dawned on me that the world I found so indispensable could after all dispense with me. It was all very well for Lady Ashleigh to assure me that I was deeply missed; but a letter from F——, who was one of the party, written 'in haste, just starting to shoot', and coming as a tardy reply to one of my cleverest, made me aware that the house party had suffered little from my absence, and that few sighs were wasted on me, even in the quarter which I had assumed to have been discreetly alluded to by the underlined all in Lady Ashleigh's 'we shall all miss you'. A thrust which smarted more, if it bit less deeply, came from my cousin Nesta, who wrote: 'It's horrid for you to have to be baking in London now; but, after all, it must be a great pleasure to you' (malicious little wretch!) 'to have such interesting and important work to do.'

Only one thing was needed to fill my cup of bitterness, and this it was that specially occupied me as I dressed for dinner this evening. Two days more in this dead and fermenting city and my slavery would be at an end. Yes, but — irony of ironies! — I had nowhere to go to! The Morven Lodge party was breaking up. A dreadful rumor as to an engagement which had been one of its accursed fruits tormented me with the fresh certainty that I had not been missed, and bred in me that most desolating brand of cynicism which is produced by defeat through insig-

nificance. *Invitations for a later date, which I had declined in July with a gratifying sense of being much in request, now rose up spectrally to taunt me. There was at least one which I could easily have revived, but neither in this case nor in any other had there been any renewal of pressure, and there are moments when the difference between proposing oneself and surrendering as a prize to one of several eagerly competing hostesses seems too crushing to be contemplated. My own people were at Aix for my father's gout; to join them was a pis aller whose banality was repellent. Besides, they would be leaving soon for our home in Yorkshire, and I was not a prophet in my own country. In short, I was at the extremity of depression. . . .*"

That description of boredom in London, and the subsequent word picture painting of the yachting adventure, were on my mind as I attended a meeting at Callaway Gardens. The robin walks with precise cadence across a carefully manicured lawn before the balcony where I sit. The lake, deep green and softly rippled by the breeze, stretches out beyond us both. Broken clouds with a hint of rain in their darkness lie close overhead. Summer has come to the Garden — to our Callaway Garden — and this too-short visit there ushers us once again into the regulated summer season of our life.

I have seen it coming some several weeks now. The poorly constrained enthusiasm of the teenager in my office last month left but discouraging hope of academic concentration as he told me of plans to spend a 6-week period of "exchange studies" with a French family in "Burgundy." My own office nurse, understandably proud and unabashedly tolerant and sacrificing of her two boys, nonetheless left unattended that look of relief tell-

ing of the mother's anticipation of the arrival of a "season" allowing a few extra moments of rest at the crest of dawn. So have many heralded the coming of summer but perhaps none with the degree of grace and elegance as the school teacher of our youth who gives quiet thanks to the "Eternal creator" of this season of modulated rest and change.

Though school bills are in our past years and teaching the young a divine calling not granted to us, yet we too look to these next few weeks with unbridled excitement. We shall leave for Scotland next week. A strange and foreign land to the two of us never having been seen nor visited before. We shall travel with friends known and nurtured through the years to that degree of familiarity leaving but little doubt that personal traveling, conversational and celebratory habits, will not impair the pleasure of the adventure.

The matter of congeniality with those one travels with was brought to our attention some years ago when we were making plans for a cruise of some several weeks duration with another couple on a motor launch not too much larger than required for the four of us. As we described the trip to another friend, one more travel wise than we, the question was put to us, "And how well do you know these people?" We advised her that they were friends of long duration only to be told "Well, be careful. Being that closely together for that long you might find out things about each other which you never knew before." And so it was that we learned that basic lesson of travel telling one to "know well those companions with whom you plan to travel."

Scotland, or not, it is the summer season that is upon us. Vacation time. The call, the urge, indeed the demand is gently nudging us to do

something about it. I know of those who take their rest, their "vacation" at home and of others who run restlessly to the far corners of the earth. We are so different in the manner whereby we seek surcease from our labors.

I sit and watch the robin and gaze upon the distant lake. I recall the canoe trip when the children were all young and the older ones of the five carried the canoes and supplies over the portages for the youngest then only 6 years of age. They all want to go again now that he is older so that he can carry his own canoe. "To get even," they say.

Shanghai and Montreux and London flash through my memory. I smile as Ashford Castle crosses the mind's eye. It lies only a brief drive from Shannon airport. They have restored it for "guests" and refurbished the gardens. A quiet loch lies away from the lawn and the rhododendrons. A young Irish boy dawdles with a fly rod on the bank. I remember saying to her, to the nurse who travels with me, "When they tell me, tell you, that our time is limited, that we need to make final plans, bring me here one last time. Place me in a chair beside the loch. A glass of Bushmill's in one hand and a fly rod in the other. Then whisper quietly, 'I love you.'"

Ah, sweet Summer! You bring such fertile thoughts to our mind.

Medicaid Precertification Department

THE GEORGIA Medical Care Foundation (GMCF) administers the Medicaid Hospital Precertification Review Program under contract with the Department of Medical Assistance. GMCF's role is to make certain that services recommended for Medicaid recipients are appropriate and medically necessary.

Using nationally recognized screening criteria utilized by most insurance agencies, GMCF reviews all precertification requests. Registered nurses do the initial screening, and any request failing the criteria is handled by a physician in the same specialty as the admitting physician. Including complete information to support the severity of the illness and the intensity of services to be provided helps to ensure a prompt and appropriate decision. In most cases, the review is completed within 2 working days.

About 96 percent of the more than 125,000 requests filed over the past 2 years were approved. Requests which are denied most often contain insufficient information or are filed too late as described below.

Elective procedures and admissions should be certified 7 days in advance. Requests for precertification of emergency procedures and admissions should be filed within 2 working days following the emergency.

Should you wish to appeal an initial decision, you have 10 days to submit additional information to GMCF or to request that a second physician review the case. If your request was denied because of timeliness, you may appeal directly to the Department of Medical Assistance.

GMCF'S Medical Director, Matthew Burns, M.D., and the author act as liaisons to the practicing physician consultants who make the review decisions. We work directly with Medicaid precertification and will be happy to discuss the program or answer your questions (404-982-0411).

With timely and complete information, GMCF can review requests promptly and appropriately. If you or your staff would like to receive technical assistance and consultation about submitting requests, call the GMCF Medicaid staff at 800-942-4621.

(Reported by Ralph A. Murphy, MD, Associate Medical Director, Georgia Medical Care Foundation, 57 Executive Park South, Suite 200, Atlanta, GA 30329.)

Quality of Care Issues Related to the "Team Concept"

THE TEAM concept of hospital patient care has brought many advantages which are self-evident. However, the practice of this concept has sometimes resulted in lapses in the quality of care provided patients. From the perspective of GMCF, the following suggestions seem pertinent to this concern. We feel that these are important not only in improving the care provided the patient but also because of their legal implications, and because they may have a bearing on PRO review.

Nurses' notes should be regularly read by the attending physician. Pertinent findings noted by nurses should be acknowledged and explained in the physician's progress notes. Nurses' notes should be particularly considered prior to discharge for any evidences of instability. Awareness of such findings and action on them might prevent premature discharge. In like manner, nurses should verbally report important changes to the attending physician. Changes in mental

status and vital signs, the occurrence of seizures and falls are examples of matters requiring prompt verbal reporting. Such verbal reports should be documented in the record, of course.

Although the attending physician should follow up on unreported laboratory or x-ray studies which have been ordered, particularly prior to discharging patients from the hospital, the laboratory personnel, radiologists, and other consultants should verbally report new findings, not waiting for the typed reports to inform the attending physician. Again, responding to a shared responsibility is implied by the "team concept."

Areas of responsibility need to be clearly delineated by the attending physician for each consultant called in. However, the attending physician needs to be sure that all abnormal findings have been considered and that someone has taken appropriate action.

When recommendations are made by consultants or by repre-

sentatives of ancillary services, such as nutrition, social service, physical therapy, pulmonary services, or by house officers, the attending physician needs to react to these recommendations or to explain in the record why the proposed action was not indicated.

Discharge planning is also a team effort. Documentation by physicians, nurses, therapists, social service, and other disciplines should reflect proper consideration of patient's needs, including appropriate environment, after discharge from the hospital. A team effort implies a shared responsibility and shared purpose. When taken seriously, such an effort will result in better medical care.

(Reported by Dan Burge, MD, Associate Medical Director — Quality, and Matt Burns, MD, Medical Director, Georgia Medical Care Foundation, 57 Executive Park South, Suite 200, Atlanta, GA 30329.)

Highlights of MAG's Monthly Meeting With Georgia's Aetna Medicare Carrier

At MAG's most recent meeting with Aetna Medicare on May 27, 1992, several important issues were addressed. Highlights are as follows:

- Monitoring of the Evaluation and Management Codes — Aetna reported that in their recent findings from monitoring of the use of E and M codes by physician's offices since January, they agreed with almost 78% of the sample of codes submitted, disagreed with 16%, and were still evaluating the remaining 7%. Codes for which the greatest amount of disagreement occurred were with reductions of codes 99213 to 99212 and codes 99214 to 99213. It was Aetna's opinion that the major difference of agreement on the use of these codes were due to the insufficient documentation of the patient's history and physical.

Aetna estimates about 10% of physicians are using the bulk of E and M codes submitted. Presently Aetna is not reducing the reimbursements on these codes and they state the "educational approach" to monitoring will continue until at least July and perhaps later.

- Aetna's new Proposed Policies on "Removal of Seborrhic Keratoses," and "Botulinum Toxin A" — Charles Whigham, MD, Medicare's Medical Director, presented two proposed policies on these areas for which they would like MAG's comments. If any member is interested in receiving a copy to offer comments, they may contact the MAG office.

- Medicare Physician Policy Guide — Aetna is now compiling a physician general policy guide which will orient physicians to current policies now in effect with the Medicare program. In addition, sep-

arate policy manuals will be available for each major specialty area — ophthalmology, radiology, etc. Aetna indicated these guides should be available by the end of the year at which time they will be sent to each physician in the state.

- HCFA Updates Medicare Fee Schedules — During May, physician offices should have received a "Urgent Special Newsletter, Medicare Fee Schedule Data Base Revision," from Aetna Medicare. This replaced an earlier update dated May 11 which was incorrect. The report lists the revised 1992 participating fees for codes affected by HCFA's adjustments to relative value units, or recalculations necessary due to the lack of an appropriate historical payment basis.

Aetna states they will automatically make adjustments to claims paid April 27 to May 6, but for adjustments which go back to January 1, physicians must identify claims and request a change. Physicians should compare the fee schedules (old and new) to see if there is a significant change in the reimbursement level to decide if changes should be requested. Many of the changes were very minor and may not be worth going to the extra trouble. To MAG's question of why the changes couldn't be done automatically to January, Aetna stated HCFA did not direct it to be handled in this way.

- Use of 1500 Claim Form and Place of Service Codes — Physicians are reminded that use of the new HCFA-1500 claim form for Medicare Part B services as been delayed until July 1, 1992. Physicians should remember that certain requirements are in effect for use of POS (place of service) codes on Medicare Part B claim forms.

Physicians who are submitting claims on the old HCFA 1500 form may use either the single or two-digit POS codes. If you are using the new HCFA-1500 form, you

should use the two-digit POS codes only. The two-digit codes were inconveniently left off of the form and may be found in the November-December 1991 Aetna Medicare Newsletter.

A reminder to you that as of May 15 all superbills were to cease. Aetna reports that they are still receiving claims with superbills only on about 0.3% of all claims and are sending them back.

- Problems Continue With Global Surgery Codes — Aetna acknowledged they are still having problems with proper payment of the global surgery codes. This is due both to physicians not being accustomed to using a modifier for many of the minor surgeries and because some of Aetna's processors are confusing the major and minor surgery days. They are trying to resolve these problems as quickly as possible.

- PAR Providers Continue to Increase — Aetna reports that the present participation rate of all providers (not just physicians) is now at almost 60% with claims taken on assignment at 85%. This is no surprise considering the reductions occurring in balance billing and other "hassle factors" involved.

- Electronic Funds Transfers Available For Claims Payment — Aetna states they will now be making available to Georgia physicians a claims payment through electronic funds transfers. They emphasize this will not allow any speed-up in claims payment — the 14 day floor must remain but for some clinic settings this may offer improved alternative. There is a cost for this service and is handled through the G.E. network. Those interested should call Paula Reed, 912-921-3012.

The next meeting of the Aetna-Medicare Advisory Committee will be on July 15 in Savannah.

- Aetna Medicare to Set Up Physician Advisory Panels — Although

Georgia has taken the lead in already having in place a physician advisory panel to its carrier, HCFA has taken the advice of the Medicare-Physician Relations Advisory Committee and required all carriers to set up such panels no later than October 1. The advisory committees will include representatives from the carriers, peer review organizations, state medical societies, beneficiaries and physicians, representing a variety of specialties and locations. The Committees will review proposed Medicare policies and policy changes, and will consider generic problems.

● *HCFA Formally OKs Physicians To Use Usual Rates to Private Insurers* — After several years of spoken but unwritten policy, physicians have finally been given approval in writing from HCFA to charge their usual rates to private insurers when Medicare is the secondary payer. HCFA states in a May 1992 directive that charges to "a payer for whom Medicare is secondary . . . are not subject to the limiting charge if the physician accepts the payment received as full payment (i.e., if there is no payment by the beneficiary)." In last few years, MAG had suggested to physicians that this could be done based on informal comments from HCFA, so we're pleased to tell you it is now official.

(Reported by Cam Taylor, Director of Medical Practice, MAG.)

CLIA Bills Mailed

HCFA has mailed the first wave of CLIA fee remittance coupons. All physicians wishing to provide lab services in their office must complete this coupon and return it to HCFA within 30 days of receipt. **If a lab fails to return the coupon, the lab will be considered non-certified and not eligible for reimbursement by either Medicare or Medicaid as of Sept. 1.** Instructions on how to determine the appropriate lab certification

level are included with the coupon. You should complete the coupon based on the tests performed, the annual testing volume and specialties you expect to provide after Sept. 1. Labs performing only waived tests pay \$100 for a two-year certificate of waiver. All other labs pay \$100, \$350, or \$600 for a registration certificate. These registration fees are required for all labs, whether they are to be regulated by a federal inspection team or by a private, federally accredited program. Subsequent mailings from HCFA will address federal fees for inspection.

HCFA has issued a 10-digit lab identification number with this coupon. Labs will be required to use this number when billing Medicare and Medicaid starting Sept. 1. The identification number will not be activated until HCFA receives your registration fees. Instructions on where to place this number on the claim form have not yet been issued.

Physician Riot Victims In Need of Equipment, Supplies

At least seven Los Angeles physicians lost their offices in the recent Los Angeles riot and fires. Office furniture, medical equipment, supplies, patient records, and insurance billing information were lost or destroyed. The Los Angeles County Medical Association (LACMA) is helping the physicians deal with government agencies providing riot relief and with the local Medicaid fiscal intermediary. If you have information about used medical equipment that may be available, please contact Tom Thompson, LACMA Director of Communications, at 213-483-1581.

Medicaid Increases Reimbursements

Medicaid is increasing reimbursements in Georgia for a number of medical services, including

rates paid for clinical laboratory services performed by physicians, independent laboratories, nurse practitioners, nurse midwives, and podiatrists. The lab rates will be increased by 4.3%; however, the maximum allowable will not exceed the prevailing Medicare rate. Other services receiving increases are as follows: community mental health centers; emergency transportation; durable medical equipment, orthotics and prosthetics, and hearing aid services; and vision care services. These changes are estimated to cost \$3,530,952 and were effective July 1. Nursing home services were also increased on July 1 at a cost of \$35,836,139; hospital services were, too, at a cost of \$30,796,657.

Other miscellaneous services to be increased at a cost of \$6,010,988 include: early intervention services, targeted case management services, mental retardation waiver program, and home health.

(Reported by Cam Taylor, Director of Medical Practice, MAG.)

More Alphabet Soup . . .

The Health Care Financing Administration proposes two changes in Medicare's Peer Review Organization program that threaten patient and physician rights.

First, HCFA proposes to implement the Uniform Clinical Data Set (UCDS) as a system of records without PRO confidentiality protection, making the data subject to the "Freedom of Information Act." The UCDS is a large data set that would be abstracted from each medical record reviewed by the PRO and would compare the data to algorithms that approve or refer the case for physician review.

Under HCFA's second proposal, local PROs would no longer screen medical records, but instead would receive and send copies to the regional Clinical Data Abstraction Centers (CDACs) for abstraction.

Physician review would be needed only if a case fails a UCDS screen.

HCFA states cost effectiveness as the reason for using CDACs for abstracting information. Yet, the cost saving has not been determined.

House Poised To Take On Health Care Reform Legislation

Recent reports out of Washington indicate that the House of Representatives' Ways and Means Committee, which is chaired by Representative Dan Rostenkowski (D-Illinois), will consider potentially far-reaching health care reform legislation shortly after the Memorial Day holiday. With the goal of presenting a consensus proposal to be taken up by the full House by July 4, there is a great deal of speculation concerning whether this package will contain comprehensive system reforms, including "play or pay" mandates on business, the extension of Medicare's RBRVS payment methodology to private insurance plans, medical liability and insurance market reforms or changes to the tax code to encourage the acquisition of health insurance by more small businesses.

House Republicans Set To Call For National Ban On Self-Referral

Echoing calls by the White House, the members of the House Republican Leader's Task Force on Health are in the process of preparing a comprehensive health care reform bill which, among other provisions, is expected to include a national ban on self-referral by physicians who have a financial interest in radiology, diagnostic imaging or physical rehabilitation centers, durable medical equipment suppliers, clinical laboratory services or radiation therapy services. This ban would be extended to all payers, thereby expanding the current ban on Medicare payments for self-re-

errals to a clinical laboratory — the so-called "Stark Bill" — which has been in effect since January 1 of this year.

Medicaid Fee Increase For Physicians Under Development By The State Department of Social Services

The Department of Social Services is working on a program to commence July 1, 1992, which will pay an additional fee to physicians who are willing to participate in a new Medical Care Coordinator Program. This program, which was legislatively authorized, will offer a full range of Medicaid services to Medicaid home relief recipients. Without this program Medicaid services now available to the home relief recipient would be sharply curtailed as a result of the latest round of Medicaid budget cuts.

The department hopes to induce physicians to participate in the program by providing a \$10 per month per recipient monthly management fee if the physician agrees to serve as a medical care coordinator. This fee is payable regardless of whether any services are provided during a month. The department is also developing several initiatives for fee increases for selective women's health procedures and for certain psychiatric services. Although these initiatives are modest, the Division of Governmental Affairs views these developments as positive particularly in these fiscally constrained times.

Feds Toughen Stance On Anti-Kickback Laws

The March 30 "Medicare Compliance Alert" reports that even low returns on an investment in a health care facility to which physicians refer patients may be considered a Medicare anti-kickback violation. Administrative Law Judge Steven Kessling ruling against physicians in the Hanlester case, said

that although remuneration paid to these physicians was not high, "it was enough to influence these physicians' judgements." Thus, even a minimal payment could be a violation of the law.

Inspector General Richard Kuserow has asked Congress for civil money penalty powers that would subject Medicare anti-kickback violators to fines as high as \$50,000. The new powers would allow the IG to go after manufacturers and other indirect participants in Medicare, it would also provide a stiff money penalty in cases where the violation doesn't warrant the penalty of exclusion from the Medicare program. Current laws allow the IG to fine providers up to \$2,000 a claim.

Resident Deferment On Student Loans

The U.S. House and Senate have passed bills that would end residents' two-year deferment on student loan payments. Currently, no interest accrues and no payments are required for the first two years of residency. Both versions of the Higher Education Reauthorization Act would end deferment but would soften the blow in different ways.

The House bill would create a new three-year deferment for residents who are suffering "economic hardship." The Senate bill would allow deferment for those who take out student loans before July 1, 1993, and would grant all residents "complete forbearance." Forbearance means that even though they have to make student loan payments they do not have to pay interest on them during the training period.

FTC Considers Fee Negotiations

Medical societies and other physician groups should have the ability to negotiate fees with third-party payers, including the government,

that are dominant in a market, the AMA told the Federal Trade Commission. The groups should no longer be barred from discussing prices and coverage terms.

Collective bargaining would be a fair counterbalance in today's climate, when a single insurance health plan can control a market area or when several plans can combine for the purpose of setting fees or practice conditions. The proposal would not be anti-competitive; it would actually promote competition. "The AMA accepts managed care in most respects and the cost containment rationale that underlies government policy, but no one wants insurance companies or employers to establish professional standards or to place all the incentives on the side of limiting care," the Association told the commission.

The AMA is asking the FTC to issue a statement indicating that physicians may lawfully join together to negotiate fees as long as:

- They do not threaten a boycott.
- Each physician remains free to deal with other professional groups.

MAG's Scientific Assembly Set for November 20-22

MAG's 17th Annual Scientific As-

sembly — that great weekend of multi-specialty CME — will be held again in Atlanta at the Ritz-Carlton Buckhead Hotel, on November 20-22, 1992. Continuing Medical Education programs are being planned by the following state or local specialty societies:

Georgia Chapter, American College of Emergency Physicians
Georgia Society of Internal Medicine
Georgia Neurological Society
Georgia Neurosurgical Society
Georgia Obstetrical & Gynecological Society
American College of Occupational Medicine, Georgia Chapter
Georgia Society of Ophthalmology
Georgia Orthopedic Society
Georgia Association of Pathologists
Georgia Society of Plastic Surgeons
Georgia Psychiatric Physicians Association

State Board of Workers' Compensation to Host Annual Seminar

The State Board of Workers' Compensation will present their Annual Seminar on August 23, 24, and 25, 1992, at the Stouffer Waverly Hotel, 2450 Galleria Parkway,

in Atlanta. This year's seminar will focus on a variety of topics including various legal aspects of workers' compensation claims, rehabilitation issues, the Americans with Disabilities Act, claims processing, safety programs, medical issues, and the new changes in the workers' compensation law. The workshop topics will be presented by many well-known speakers in areas related to workers' compensation. The seminar will conclude with an Awards Banquet recognizing leaders in the field of workers' compensation.

The 3-day event will be directed toward providing attorneys, employers, insurers, self-insurers, rehabilitation suppliers, medical providers, and personnel and safety officers with current information on workers' compensation in Georgia. Registration fee for the Seminar is \$160.

For further information, contact Janet Long at 404-656-5656.

Having Your Cake and Eating It, Too: Common Sense in Charitable Trust Planning

Stephan C. Barton

IF THE TOTAL appreciated value of your entire estate approaches 2 million dollars, you need to do some serious planning now to avoid federal estate taxes and state inheritance taxes (after death), plus federal income taxes.

Are you aware that you can simultaneously: reduce federal estate taxes, reduce state inheritance taxes, avoid probate cost and delays, reduce current income taxes, and receive income now and for life? All of these benefits may be yours as a result of a gift to your church, a charity, a college, or foundation, through the use of a Charitable Remainder Annuity Trust, a Charitable Remainder Unitrust, or a Charitable Lead Trust. In this article, we will explain how to create a "win" for the donor and the receiving charity as well.

Charitable Remainder Annuity Trust

A Charitable Remainder Annuity Trust is a trust designed to permit annual income of a fixed amount to a non-charitable beneficiary (usually the donor), with the remainder going to a charity or non-profit organization. Here is how it works: The donor transfers money, securities, or property to a trust which pays the donor a fixed dollar amount each year for life. If the income of the trust is sufficient to meet the required annual income payment, the difference is paid from principal or capital gains. If the income is greater than the fixed amount required in any 1 year, the

‘Are you aware that you can simultaneously reduce federal estate taxes, reduce state inheritance taxes, avoid probate cost and delays, reduce current income taxes, and receive income now and for life? 9

surplus is reinvested in the trust.

The income tax deduction is computed in the year funds are irrevocably placed in trust, and the deduction is measured by a federal tax table which considers the charity's right to receive trust assets at the donor's death, as well as the donor's age at time of the gift. The donor must receive at least 5% of the gift's value each year.

EXAMPLE: A 55-year-old donor transfers \$100,000 to a Charitable Remainder Trust. The trust is invested in a guaranteed investment vehicle, yielding 9%. The donor may elect how much income is desired annually, from a minimum of 5%. (The more current income, the

less current tax deduction.)

With a 5% income trust, here are the benefits:

- 1) Donor receives a \$5,000 annual income for life.
- 2) Donor receives a current federal income tax deduction of \$59,977. (A 65-year-old would receive a deduction of \$66,015 for the same gift.)
- 3) Donor reduces their gross estate by \$100,000 for federal and state estate tax computations, saving their estate as much as \$40,000 in federal tax and \$7,000 in state tax (for a \$700,000 estate).
- 4) Charity receives \$100,000 at death of the donor, free of probate expense and delay.
- 5) The *value* of the gift from the donor to the charity can be replaced for the benefit of the donor's heirs *without income tax, without estate tax, and without probate expense and delay*. To provide this benefit, a portion of the income to the donor should be given as an annual exclusion gift to heirs to purchase the equivalent value of the gift in life insurance on the donor.

Federal estate tax is nothing to ignore or pass off lightly. If you think you could possibly be approaching 2 million dollars in the total value of your estate, you need help. Remember: Your assets are taxed according to *current fair market value, not what you paid for them*.

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This Department is sponsored by MAG Mutual Insurance Company. If you have suggestions for article topics, contact either the *Journal* office or Charles D. Hollis, Jr., MD, Chairman, MAG Mutual Insurance Company, 404-842-5600.

Check Gross Estate Value

To check value of your gross estate, be sure to include the following:

- All real estate, at fair market value, not the city or county tax base;
- All stocks, bonds and securities;
- All life insurance owned by you personally;
- "Good will" value in any business;
- Pension funds and Individual Retirement Accounts;
- Probable inheritances;
- Personal possessions; and
- Any other assets.

Charitable Remainder Unitrust

A charitable remainder trust can be either an ANNUITY TRUST (described above) or a UNITRUST. Both types of trusts are designed to permit payments of a periodic sum to a donor, with the remainder going to a non-profit organization. The key distinction is in how the periodic payments are computed.

The unitrust works like this: the donor irrevocably transfers money, securities, or property to a trustee. In return, the trustee pays the donor income from the gift for life. The donor can require that if she/he predeceases his/her spouse, she/he also would receive the income for life. The donor receives payment based on a fixed percentage of the fair market value of the assets placed in trust, and the asset's value is reappraised each year. For example, if the unitrust states that the donor is to receive 5% of the trust assets each year, and the assets in the trust are valued at \$100,000, then the donor would receive \$5,000 the first year. If the assets' value increased to \$120,000 the second year, the donor would receive \$6,000, still 5%. If the income of the unitrust is insufficient to pay the stated percentage, capital gains or principal could be used

to make up the deficit, if the donor wishes.

Let's look at another example: assume that \$250,000 is placed into a unitrust by a 67-year-old person. The annual income selected is 9% (5% is the minimum allowed by law). The donor's benefits follow:

1. A \$22,500 annual income for life
2. Current income tax deductions of \$90,712 (A 70-year-old person would receive a tax deduction here of over \$102,000)
3. A reduction in the estate size for federal estate tax purposes of \$90,000.

The choice between an annuity trust and a unitrust involves a number of considerations. Generally speaking, the annuity trust is simpler to administer and may yield a larger charitable contribution deduction. However, the unitrust is able to receive additional contributions, and the donor has the advantage of receiving increased income if the gift increases in value.

Charitable Lead Trust

The other type of estate planning charitable trust which is extensively used is a charitable lead trust. In a charitable lead trust, the charity receives the income interest up front for a period of years, and the remainder interest is delivered to family members or trust beneficiaries at expiration of the income interest of the charity.

This device is used to increase the amount which may be bequeathed to children and grandchildren without imposition of full transfer tax. This technique may be thought of as "deferred giving" to your descendants, and it allows the donor's estate a charitable deduction.

How It Works

The donor transfers income-producing property to a trust. The trust

will provide the charity with a guaranteed annuity or annual payment equal to a fixed percentage of the fair market value of the trust property as annually computed. At the end of the fixed period, the property will be returned to the donor or his/her beneficiary.

Income Tax Benefit

Assume that a donor has a pregift taxable income of \$45,000 and owns \$20,000 in securities earning 5%, which she/he eventually wants to transfer to a daughter. Assuming the donor files a joint return, she/he will reduce the income tax in the year the trust is funded from \$8,453 to \$5,291, and his/her spendable income will increase from \$36,547 to \$39,709. Plus, the daughter will receive the \$20,000 when the trust is terminated.

Estate Tax Benefit

When the property is placed in the trust, an estate tax deduction is allowed for the actual value and the front end annuity interest given to the charity. For example, if someone left a \$1,000,000 bequest in trust to pay \$60,000 per year to a charity for 24 years, the donor would receive an incredible \$539,082 estate tax deduction, and the donor's beneficiaries would eventually receive the \$1,000,000.

An even greater estate tax deduction is possible by properly combining the annuity payout level and the length of the payout. For example, an annuity payout of 9% of the trust's original corpus for 24 years would result in an estate tax deduction in this example of \$808,623. Furthermore, beneficiaries of the trust may also be named as trustees and therefore control the property they someday will own.

Charitable giving can be a real benefit to a donor (income and estate tax deductions), his/her beneficiaries (estate tax deduction and control), and the charity (the gift).

Maximizing Productivity of New Associate Physicians: Proven Strategies

Gary Matthews

FOR MOST PRACTICES, the transformation of a new associate physician into a viable productive team member is too often a frustrating process. Unrealistic expectations along with insufficient leadership and guidance are the primary causes of this frustration.

Statistics show that the vast majority (about 75%) of practices recruit associates while in a crisis management or reactionary mode. Their primary motivation for recruiting an associate is to find someone who can help relieve stress and share call. Once senior physicians become relieved of their stress, however, they begin to second guess their decision to bring on an associate. Soon they find themselves thinking about what they're paying the associate and what he/she is contributing to the practice in return. Most end up believing that their new associates are not productive enough, aren't generating enough new patients, and are being too wasteful of practice resources.

The fact is, such expectations from senior physicians are really quite unrealistic. Generating new patients, working efficiently, and understanding practice procedures don't just happen overnight. Because most of their clinical experience has been hospital-based, few new physician associates have any idea of what it's like to work in a private, office-space practice, let alone how to work effectively and

Statistics shows that the vast majority of practices recruit associates while in a crisis management or reactionary mode. 9

efficiently within one. With proper leadership and direction, however, most new associates can bring far more value to a practice than the investment expended to bring them on board.

The key to maximizing their potential is to implement specific operational, organizational, and marketing strategies to help the new associate assimilate into the practice as quickly and easily as possible. Following are some examples of such strategies.

Operational Strategies

These are the "nuts and bolts" of establishing your new associate as part of your team. The more steps you take in this area before your associate comes on board, the sooner he/she will be able to function as an active, productive member of your team.

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Obtain Appropriate Provider Numbers: As soon as the decision is made for a new associate to come on board, be sure that he/she enrolls in appropriate managed care programs and obtains Medicare and Blue Shield provider numbers. Delays in obtaining provider numbers can have a dramatic negative impact on practice reimbursement and receivables. They will also cause public relations problems with patients as well, since patients won't be reimbursed for procedures without a physician provider number either.

Re-evaluate staffing: With the advent of RBRVS, a new item on your agenda should be to re-evaluate your existing physician staffing strategy. Under the new physician payment limitations, new physicians are reimbursed at 100% of Medicare allowable fees for office visits, but only 80% (first year) for procedures. Therefore, you may want to consider having your new associate conduct most or all of your patient visits and having your senior physicians perform all procedures. Also in light of RBRVS, if your practice has a satellite office located in a Health Professional Shortage Area (HPSA), Medicare reimbursement will be greater if it is staffed by the associate physician, since new physician payment limitations are exempt in HPSAs.

Other steps to take before a new associate comes on board include:

- Obtaining malpractice insur-

ance coverage for the new associate.

- Notifying your practice's group insurance carriers of the new associate's effective date of employment.

- Notifying your answering service of the arrival of the new physician and his/her credentials, specialties and subspecialties.

- Establishing when to start scheduling appointments for the new associate and what his/her office hours will be.

If your practice carries overhead insurance, you may want to make a note to discontinue this insurance after your new associate has been successfully practicing for 6 months.

Organizational Strategies

It is estimated that one/half of all new associate physicians leave their group practices within the first 2 years of employment. The primary reasons for their leaving include:

- 1) Lack of communication with senior physicians;

- 2) Lack of willingness to nurture referral sources or an inability to understand how to do so;

- 3) An inability to adapt to the increased productivity/accountability requirements of private practice; and

- 4) An inability to assimilate the practice's style of patient care.

The following organizational strategies are geared to cultivate strong and cooperative relationships between associates and senior physicians so that the transformation of the new associate from employee to full practice partner can occur with as few problems as possible.

Assign a Designated Mentor: This is the most important organizational strategy that a practice can incorporate to help assure the early success of a new associate. The designated mentor should be a se-

nior physician who preferably has the time and the personal interest in helping the new associate acclimate him/herself to practice politics, operations, and procedures as soon as possible. The designated mentor should encourage an environment of two-way, non-threatening communication where the associate physician can feel comfortable presenting ideas and/or registering complaints. The mentor should also help the new associate understand the business side of private practice so productivity and accountability expectations can be better understood and less threatening.

“Because most of their clinical experience has been hospital-based, few new physician associates have any idea of what it's like to work in a private, office-space practice, let alone how to work effectively and efficiently within one.”

Establish Formal Performance Review & Evaluation Criteria: Determine the criteria by which your new associate physician will be evaluated and discuss them as soon as the physician comes on board. The designated mentor should have periodic “check ups” with the associate physician, taking stock of how well he/she is performing in relation to the established criteria and answering any questions he/she may have about defined expectations. Formal performance reviews should be held every 6 months.

Provide Coding Training: Now

more than ever, it is extremely important that your associate understand procedural (CPT) and diagnostic (ICD-9) coding. Because most physicians receive no training in this area during residency or fellowship, it is extremely important that your practice provide it — not only for the benefit of the associate physician, but for the benefit of your practice as well.

Don't Become Competitive with Your Associate: Far too often established physicians end up in a competitive posture with new associates. Although this is not an intellectual intent, the situation often evolves as result of human nature. On a subconscious level, senior doctors resent new associates “taking over” their patients which, in turn, leads them to find fault with the way associate physicians treat and relate to patients. This creates a barrier to cultivating a new associate into a future partner. The best way to avoid this situation is to develop an objective, win/win mentality and to actualize realistic expectations.

Marketing Strategies

One of the most effective ways to help your new associate maximize productivity in minimum time is to implement new marketing strategies that will help position him/her within the medical and general community. Some of the most uncomplicated, yet successful marketing strategies you can implement include the following:

Make Personal Introductions: Getting a new associate fully integrated into the medical and general community should be the major priority during an associate's first month or two. Assign a senior physician (this could be the designated mentor) to take the responsibility of personally introducing your new associate to the medical community. This means personally visiting all existing referral sources including

physicians, allied health professionals, and hospital staff and administrators as well. This will require light scheduling of patients for both the associate and senior physician. Sponsoring an open house to which all referral physicians and allied health professionals is an additional way to personally introduce your new associate to the community.

Fully Educate Your Staff: It's imperative that all staff members — particularly your front office staff — be fully informed not only about the date a new associate is expected to come on board, but also about the associate's training credentials and subspecialty interests. Encourage your staff to promote the arrival of your new associate among patients through positive conversation.

Announcement to Current and Inactive Patients: Send a personal announcement letter to active as well as inactive patients. This letter should include highlights of your associate's training as well as his/her specialty and subspecialty interests. It should also include information about how the practice and patients will benefit from the services of the new physician. If, for example, your new associate is the third internist to join the staff, you may want to emphasize that the addition of this new physician will provide easier access and shorter waiting times for appointments. If, on the other hand, your new associ-

ate brings in a new subspecialty such as cardiology, you'll want to emphasize that patients will benefit from your expanded diagnostic and clinical capabilities.

Announcements to Existing and Potential Referral Sources: A similar announcement letter should be sent to existing and potential referring sources including physicians and allied health professionals such as pharmacists, physical therapists, school nurses/counselors etc.

Investigate Existing Market Potential: If your new associate brings an additional specialty or subspecialty to your practice, review both your active and inactive patient files to determine who may be in need of his/her special services. Then, send a special announcement letter to them explaining the new service and how it will benefit them.

Media Release: A media release should be prepared and distributed to local media, with a photograph of your new associate if possible. Local hospital marketing departments may be willing to help produce and distribute these releases. If your hospital is unable to do so, it may be able to refer you to a public relations professional who could develop this release for you.

Update Listings: An often overlooked item in the marketing area is the updating of public listings. Someone should be assigned the responsibility of updating the fol-

lowing to ensure maximum awareness and immediate acceptance of your new associate:

- Business cards, letter head, superbills, appointment cards
- Patient information brochures
- Physician referral services
- Hospital emergency room call rotation
- Telephone directory listing
- Building directories
- Building and office signage

Schedule Speaking Engagements: Local business and community clubs and organizations as well as school systems often have needs for effective speakers. Get a list of organizations from your local Chamber of Commerce and contact them personally. Ask what their needs for speakers are and how your new associate may help them meet those needs.

Patience Will Render Success

A great deal of frustration can be eliminated if more medical practices would change their motivations for bringing on new associates from short-term crisis intervention to long-term relationship building. Reality is that it takes 2-3 years for an associate to truly assimilate into a practice and become fully productive. Implementing the above strategies can help senior physicians develop more realistic expectations and at the same time maximize the potential for an associate's long-term success.

Medical Record Documentation and the New Visit Codes

Charles H. Whigham, MD

THE NEW CPT codes describing physician evaluation and management services have been in use since January, 1992. Hopefully, physicians are becoming accustomed to using these new codes. Like other Medicare carriers around the country, Aetna Medicare in Georgia has been monitoring physician use of the new codes. Some points relating to the use of the codes are worthy of mention at this point.

Most physicians are using the new codes correctly. However, random review of services by Medicare indicates that some physicians are not documenting their services sufficiently in some cases. If a service is not documented in a patient's medical record, Medicare carriers must assume that the service was not rendered. Some physicians may disagree with this, but most will agree that government money should not be spent unless it can clearly be shown delivered. Some physicians have complained about the complexity of the new evaluation and management codes, and the difficulty in deciding which code to use. The new coding system was the result of a tremendous amount of work on the part of the AMA CPT Editorial Panel and others. The system was not designed by Medicare Carriers. A simpler system with fewer coding choices certainly has some appeal to many interested parties, but the current system is what Medicare carriers must use.

Random review of services by Medicare indicates that some physicians are not documenting their services sufficiently in some cases. If a service is not documented in a patient's medical record, Medicare carriers must assume that the service was not rendered.

In most instances where an incorrect code has been selected by a physician to describe an evaluation and management service, the problem has been found to be inadequate documentation in the patient's medical record of either the history or physical examination. Physicians should keep in mind that four levels of physical exam are discussed in the CPT manual:

1. "Problem Focused" which refers to an examination limited to the affected body area or organ system.
2. "Expanded Problem Focused" which refers to examination of the affected body

area or organ system and other symptomatic or related organ systems.

3. "Detailed" which refers to an extended examination of the affected body area(s) and other symptomatic or related organ system(s).
4. "Comprehensive" which refers to a complete single system specialty examination or a complete multi system examination.

Also, there are four levels of history taking discussed in the CPT Manual :

1. "Problem focused" history which refers to the chief complaint and a brief history of the present illness.
2. "Expanded problem focused" history which refers to the chief complaint plus a brief history of present illness and pertinent system review.
3. "Detailed" history which indicates that the chief complaint was recorded along with history of present illness, extended system review, pertinent past, family and/or social history.
4. "Comprehensive" history which includes chief complaint, extended history of present illness complete system review complete past, family and social history.

Generally, documentation of the complexity of decision making has been more adequate than the doc-

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umentation of the history and physical exam; the diagnosis established or are usually well documented and provide support for this component of an evaluation and management service.

The type of service being rendered determines whether all three components (history, physical exam, complexity of decision making) are necessary for the use of a particular evaluation and management code. For example, a second level established patient office visit (99212) requires two of the following: problem focused history, problem focused exam, straight for-

ward decision making. Please see 1992 CPT Manual for full discussion. When selecting a CPT code to describe a patient visit, it is important to consider the level of the history obtained and documented. The documentation of the service is essential.

Some physicians use the "S.O.A.P." format for recording their entries in medical records. They simply record the patient's *Subjective* complaint (chief complaint or complaints and history), *Objective* findings (physical exam and other objective data), *Assessment* (diagnosis or differential diagnosis or impression), and *Plan* of

treatment or evaluation. While Medicare does not require that any particular format be used by physicians in making entries into medical records, the "S.O.A.P." format is a simple method of clearly recording the important components of a patient encounter on a consistent basis.

Medicare carriers are charged with the responsibility of seeing that Medicare funds are expended for services which were actually rendered and which are covered by the Medicare program. For this reason medical record documentation is of critical importance to physicians and carriers alike.



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A comprehensive
school health education program

Growing Healthy

Opening
the
door
to
good
health

The Challenge: A Generation of "Growing Healthy" Children

Julia von Haam

EIGHT FIRST graders sitting in a circle are asked to smell a jar of potpourri. "That smells good, like perfume." Next comes a jar with cigarette butts. "Ugh!" "That stinks!" Asked if they think something that smells like that would make them feel good, the teacher is rewarded with a unanimous and lusty, "No!!"

This is one activity in the GROWING HEALTHY curriculum, a comprehensive school health education program for grades K-7 developed by educators and scientists and promoted by the National Center for Health Education.

Everyone agrees that the future of our country is tied to a healthy generation of youth, a generation that is able to make wise choices about health and resist the temptations of destructive behaviors such as smoking and alcohol or drug abuse. Providing the tools and the knowledge to develop good health practices is a challenge shared by parents, schools, health professionals, and the business community. Dr. David Poehler, a GROWING HEALTHY facilitator, puts it this

way, "Health education is the most basic of basics, it is every bit as basic as reading and arithmetic."

The GROWING HEALTHY Curriculum

The GROWING HEALTHY program has been adopted by over 7,000 of the nation's schools in 41 states and taught to more than a million students. It is the fastest growing comprehensive school health education program in the country.

Students spend approximately 30 minutes a day for 12-14 weeks in lessons and activities that address concerns such as:

- Personal health practices and safety
- Family life and responsibilities
- Emotional health and self-esteem
- Effects of smoking, drugs and alcohol
- Understanding the function and structure of major body systems.

Mrs. von Haam is a member of the Medical Association of Atlanta and guest editor for this issue of the Journal.

Instead of textbooks, GROWING HEALTHY uses film, slides, records, pamphlets and resource people to supply the information. Displays, tools, a miniature skeleton, a model of the eye, a smoking machine, a stethoscope all help to capture the children's imagination and engage their full participation.

Each grade level has a compelling theme:

Kindergarten: Happiness is Being Healthy

First Grade: Super Me

Second Grade: Sights and Sounds

Third Grade: The Body — Its Framework and Movement

Fourth Grade: Our Digestion — Our Nutrition — Our Health

Fifth Grade: About Our Lungs and Our Health

Sixth Grade: Our Health and Our Hearts

Seventh Grade: Living Well With Our Nervous System

Key factors to the success of the program are intensive teacher training workshops and the encouragement of parental and community involvement.

AN INTERVIEW WITH DAVID POEHLER, PhD

Julia von Haam

THE AUTHOR, A-MAG President-Elect Carol Ann Hardcastle and Barbara Tippins, AMA-A Health Projects Chairman, met with David Poehler, PhD, a school health education specialist, at his office at the Centers for Disease Control (CDC). The tone for the meeting was set when Dr. Poehler met us in the lobby and suggested that we walk up to his office, a practice that is encouraged for everyone in the building. We were grateful that he was on the third, not the sixth floor!

Hardcastle: We want A-MAG to take a leadership role in getting "Growing Healthy" into schools throughout the state and need your help in avoiding pitfalls as we get started.

Poehler: Let me tell you how the CDC became involved in this. We were asked by Tilson School (DeKalb County) to be their partner in education. We knew that we couldn't be an IBM or Georgia Power and give them lots of money for baseball uniforms, special outings, and such. We realized that our strength would lie in school health education. We offered them their choice of five health programs, and they chose "Growing Healthy." They thought it was by far the best, and I tend to agree. Compared with the other health curricula, it's not the Chevrolet, it's the BMW.

Tippins: Do you mean because it is more expensive?

Poehler: It is very expensive, but it is also of high quality. Pro-

rated over a period of 10 years, "Growing Healthy" will cost less than purchasing health textbooks, but the start up costs for material hit you with a bang. That's what the schools can't afford.

Hardcastle: Is the "Growing Healthy" program fairly recent?

Poehler: Actually, it is about 25 years old. It is one of only two health programs on the National Diffusion Network (NDN), which means that it has undergone intense scrutiny. Most principals and superintendents are very familiar with the NDN — they have programs in math, history, science, shop, and so on. The programs are the cream of the crop.

Tippins: Did you have to go to the school board or the state superintendent first to get permission to use this program?

Poehler: We already had a relationship with Tilson School, so we started there by meeting with the principal and several lead teachers. It doesn't work if you try to shove this down someone's throat — it's vital that the school leaders see the value in this and want to implement it. One of the school's tasks was to obtain the necessary approvals. The chain of command varies in different communities, and you have to figure that out. Ideally, you get parents involved from the outset as well. Once the teachers experience the program they become its most enthusiastic advocates.

Tippins: What is an average

budget for the program?

Poehler: The teaching materials for the total program grades K-7 would be about \$24,000, and teacher training would be several thousand more.

Tippins: Could you lower the budget by just concentrating on a few grades?

Poehler: Yes, it's structured so that the programs for the different years are interacting, but they can stand alone.

von Haam: Have there been studies to monitor the effectiveness of "Growing Healthy"?

Poehler: There have been over 400 studies, more than any other program, and we have documented evidence which is outstanding. Not only are health practices positively affected, it has been shown to raise math and reading skills and increase school attendance. We have numerous anecdotes about how parents and teachers have stopped smoking, how the CPR training has saved lives — just story after story.

Hardcastle: Do you think the public/private partnership is essential in this program?

Poehler: Absolutely. The schools need some kind of help to get it going and sometimes to keep it going. New York City has the "Growing Healthy" program in its schools because concerned citizens and groups raised over \$50 million. Organizations like yours have the contacts in the community to make it work.



One of the hands-on activities in the "Growing Healthy" program is comparing the odors of cigarettes and potpourri. Here a youngster sniffs cigarette ashes & butts.

Implementing the Program

Implementing the program is costly. The teacher workshops, training manuals, student workbooks, and hands-on materials come to approximately \$6 per student per year. However, money spent in prevention is one of the most effective ways of containing rising medical costs. The program has been structured so that it can be adopted in its entirety or partially — one grade or seven, one school or all of the schools in a district.

In some communities government funds have been made available, including state legislature appropriations and "risk reduction" monies. In others, private foundation and corporate support have augmented local public monies.

Some philanthropic groups have paid for the program as part of adopting a school.

The New York City Story

Dr. John Waller, an internist and vice president of the New York Academy of Medicine, was so convinced of the urgent need to promote health education in the elementary public schools that he chaired a medical society committee which undertook a 2-year study of available health education curricula. GROWING HEALTHY was selected on the basis of its intensive teacher training, interdisciplinary approach, and hands-on methodology.

The Academy of Medicine then invited every public and private sector organization in New York

City with an interest in school health education to a coalition-building meeting. The 41-member GROWING HEALTHY/NYC (GH/NYC) coalition that was formed included individuals, foundations, corporations, voluntary health organizations, and representatives of the city school system. A 5-year demonstration project was established, and approval was obtained from local school boards and superintendents. Five schools were selected for the demonstration project in 1984, and the results were overwhelming. With the support of the President of the City Council and the Mayor's Office, GH/NYC was awarded \$1.3 million to expand the program throughout the city.

The coalition attributes a large measure of the program's success to the unprecedented partnership between public and private sectors that went far beyond financial support and also cites the willingness of the New York Academy of Medicine to take a leadership role as a key ingredient.

Conclusion

Physicians and their families potentially have substantial insight into and impact on community health practices. They can stand by and watch as young people abuse themselves through destructive behavior. Or they can take a role in providing young people with experiences and knowledge that stimulate them to make healthy choices throughout their lives. The challenge is to see that all children receive comprehensive health education — to help all children learn about GROWING HEALTHY.

Family Violence: A National Epidemic

Barbara S. Tippins

FAMILY VIOLENCE has been termed the disease of the Nineties, touching as many as one-fourth of all American families. The Centers for Disease Control has proclaimed interpersonal violence to be a major health problem, with the same kind of tolls in loss of life and cost to society as cancer and heart disease. It cuts across every economic level of society, every culture, and every race.

Domestic violence often includes forced isolation, belittling, verbal abuse, threats, intimidation, and the restriction of access to money, transportation, and other resources. Physical violence, the aspect of battering most frequently measured and examined, may include slapping, punching, kicking, choking, and attacks with weapons.

In the past, interpersonal violence may have been seen as a problem for the social service or the justice system; but today, family violence has arrived into the sphere of public health. Dr. Robert E. McAfee, Vice-Chairman of the AMA Board of Trustees, states, "Virtually

every physician in every specialty in every part of America regularly treats patients who are victims of violence. Yet too few physicians make the connection that the injuries or illnesses they are treating are a result of a nationwide epidemic as virulent, as pervasive and as destructive as the AIDS epidemic itself."

Forms of Domestic Violence

Wife Battering. This is the largest cause of injury to women in the United States, more common than automobile accidents, muggings, and rapes combined. As many as 35% of women who visit hospital emergency rooms are there for symptoms related to ongoing abuse, but perhaps as few as 5% of the victims of family violence are identified as such.

Child Abuse. There were 2.4 million reports of child abuse and neglect recorded in 1989. Child homicide is now among the five leading causes of death in children ac-

counting for one in 20 deaths of people below the age of 18, with the majority of infant victims being killed by parents, relatives, and older children.

Child sexual abuse represents the fastest growing category of abuse reporting. It has been estimated that one in ten girls and two in one hundred boys are sexually abused before they are eighteen, translating into 210,000 new cases of sexual abuse each year.

Sibling Violence. This is sibling rivalry as its most devastating. It is not about the usual kicks, shoves and pushing children engage in, but about the fact that more than one hundred thousand children in the United States annually face brothers or sisters with guns or knives in their hands.

Parent Abuse. Approximately 900,000 parents are beaten by their own children each year.

To promote medical community involvement in this tremendous problem, the AMA is launching a nationwide effort to involve physicians in preventing family violence

Mrs. Tippins is a Past President of the Auxiliary to the Medical Association of Georgia.

and providing help for the victims of child physical and sexual abuse, elder abuse, and spouse abuse. The AMA asks, "Are you concerned about the effects of family violence and victimization within your community? ... Become an advocate within your community for the prevention of family violence." The AMA has formed a National Coalition of Physicians Against Family Violence. Through the Coalition, the AMA hopes to involve physicians and auxiliaries in activities that address issues of child abuse, sexual assault, domestic violence, and elder abuse because physicians have the unique ability to identify the symptoms, first hand. By joining the National Coalition, the AMA feels, physicians and their spouses will be showing their concern about the effects of family violence and victimization and will become committed advocates within their community for the prevention of family violence. Those who join the Coalition will:

- Be informed about local contacts and referrals
- Become aware of local and regional resources
- Be provided with information regarding model educational programs
- Become aware of treatment guidelines and protocols.
- Have access to newsletters, public education materials and other publications
- Receive an official membership card and poster alerting patients of the physician's interest in and concern for this problem.

There is no cost to an individual to join the Coalition — only commitment to help curb this problem. For information on joining the Coalition, write to: Roger Brown, PhD, Department of Mental Health, American Medical Association, 515 North State St., Chicago, IL 60610 .

Kevin J. Fullin, MD, a Kenosh, Wisconsin, cardiologist, felt

that hospitals can play a vital role in identifying and treating victims of family violence, since sooner or later most victims of violence end up in a hospital. When he saw the injuries to the victims he treated in the emergency room of his local hospital, his concern and compassion led him to become the prime mover behind a campaign to get these people the support they need.

The result is the domestic violence project in Kenosha, a center to treat victims of family violence and to provide the support they need to go on with their lives. Dr. Fullin was honored this year by the AMA for his advocacy work. He believes the role of the physician in getting help for these victims cannot be underestimated. Dr. Fullin told auxiliaries attending his breakout session on Family Violence at the 1991-92 AMA Auxiliary Conferences, "When physicians come up to me and say, 'You are the doctor who treats battered women.' I responds with, 'Yes, I do, and so do you!'" Dr. Fullin says when physicians learn to recognize the victims of violence, more can be done for them such as referrals to a shelter, legal aid, or to counselors who understand.

The AMA asked the Auxiliary to join in the efforts to stem this tide of family violence, so the AMA Auxiliary launched a three-part program that includes education about the problem; support for the victims, and resources for physicians concerning shelters, safe houses, and hotlines where their patients may receive help.

The first goal of the auxiliary is to tell people about violence and the toll it takes on victims and the entire community. Then auxiliaries will help people understand what they can do to help prevent the problem. The auxiliary plans to educate school personnel on the signs of family violence in children and how they can be of help to these children. The media will be

encouraged to educate the public about family violence, its consequences and its prevention. By working in coalitions with businesses and private agencies, auxiliaries hope to promote public awareness through public service announcements, billboards, posters, and other vehicles that will reach the community.

The second part of the auxiliary campaign concerns support for the victims of violence by helping to see that there are shelters for abused women and children in our communities — women's crisis centers; safe houses, hotlines and counseling centers for all victims of family violence.

And finally, the auxiliary wants to provide physicians with listings of community resources for victims. These listings may take the form of rolodex files, booklets, "yellow pages," type-referral sheets.

Sherry Strebel, 1991-92 President of the AMA Auxiliary, stated in her inaugural address, "The tragedy of family violence is as much a challenge to the general health and welfare of this nation as it is to the system of justice and law. As members of the medical community, we must become involved in creating a safer world, in teaching self esteem, and in educating the public to involve people in family violence prevention and support programs." We must all work together to break the chain of violence.

Anthropologist Margaret Mead, once said, "Never doubt that a small group of committed individuals can make a difference in the world! For indeed, it is the only thing that ever has." Sherry took that philosophy a step further and said, "If you are committed to a cause and are willing to risk your involvement for that cause, you alone can make a difference, but if all auxiliaries join together, we can make an even greater difference. We can change the world."

Georgia Land



*A Collection of
Georgia Recipes
Historic Landmarks
& Scenic Attractions*

A-MAG Presents New Cookbook

Georgia Land

A Collection of Georgia Recipes, Historic Landmarks, & Scenic Attractions

Mary Ann Marks

WELCOME TO *Georgia Land!*

The Auxiliary proudly presents its new cookbook, and, as the name implies, it is more than recipes. *Georgia Land* not only showcases the culinary skills of Auxiliary members and their families, but also treats the reader to a tour of Georgia and a bit of Georgia history through pen and ink drawings of historical landmarks and scenic attractions around the state.

The title was inspired by the song, "Georgia Land," written by Frank L. Stanton, one of Georgia's Poet Laureates and the state's most popular poet of the 1890s. Though never the state song, "Georgia Land" was a favorite with school children in Georgia for many years. It also was a favorite of the Cookbook Committee over numerous title suggestions, for it seemed to enhance the regional historical theme already adopted for the book.

So, travel with us across "Georgia Land." Share our "Sunday best" recipes. Discover 10 geographic divisions of our state, each representing a food category and each introduced and illustrated by a talented Georgia artist. Meet the 12 artists

who graciously contributed their time and talent to "Georgia Land," many of whom are Auxiliary members.

Drawings for the 10 section Title Pages are the work of Margaret Bartholomew (AMAA), who selected prominent landmarks from each section to illustrate. A brief history of each section was compiled by Jan Collins (AMAA), Editorial Chairman of the Cookbook Committee. This history introduces each section of the book. The cover illustration was produced by Cheryl Dennis (AMAA), Design/Format Chairman. This is definitely one book you may judge by its cover!

Named as an Auxiliary project by 1991-92 A-MAG President Ingrid Brunt, the production of a state-wide cookbook gained immediate popularity. Recipes were submitted by members of the 32 county auxiliaries in Georgia. Many of the selected recipes reflect local cuisine and Georgia products. Others reflect varied backgrounds and inter-

ests. Most are family favorites, and all are offered for your enjoyment. All were carefully tested and evaluated under the supervision of Jeanne Smiley, (AMAA) Testing Coordinator, and editing and final selection of recipes was directed by Carol Ann Hardcastle (DeKalb), Recipe Chairman.

While the cookbook is an expression of the Auxiliary — our tastes and styles — its goal far exceeds food preparation and cooking. All profits from the sale of *Georgia Land* will provide health projects and health education programs presented by county auxiliaries to communities throughout Georgia. Health issues addressed by the Auxiliary include: Teen Sexuality, AIDS Education, Safety, Drug & Alcohol Prevention, Suicide Prevention, Comprehensive School Health Education, Healthy Lifestyles, The Elderly, Mammography Awareness, Family Violence, Environmental Concerns, and Homeless Issues.

Other Auxiliary members serving on the Cookbook Committee include: Grace Walden (DeKalb),

Mrs. Marks is a member of the Auxiliary to the Medical Association of Atlanta and Chairman, A-MAG Cookbook Committee.



Tasting and toasting . . . recipes from the AMAG cookbook "Georgia Land" are (from L - R) Ingrid Brunt, Mary Ann Marks, Allyce North, Maureen Vandiver, Jan Collins, Jeanne Smiley, Connie Menendez, Talitha Russell, and Carol Ann Hardcastle.

Recipe Collection Coordinator; Allyce North, (AMAA), Word Processor; Maureen Vandiver (DeKalb), Connie Menendez (Bibb) and Jana Hill (Richmond), marketing Committee; Nancy Wolff (Muscogee), Finance Chairman; and Sally Darden (Hall), Advisor.

To obtain copies of *Georgia Land*, contact members of your local county auxiliary, or use the order form provided below.

BON APPETIT!

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Auxiliary to the Medical Association of Georgia
938 Peachtree Street, NE
Atlanta, GA 30309

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Enclosed is my check for \$ _____, payable to A-MAG Cookbook Fund.

Ship to:

Name _____

Address: _____

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Teenage Pregnancy: Everyone's Responsibility

Phyllis F. Schwartz, MN, MA

TEENS in the United States are becoming sexually active at earlier and earlier ages. A 1991 study by the Centers for Disease Control found that close to 26% of 15 year olds reported having had sex, more than five times the number reported in 1970. A survey done in Carroll County, Georgia, found that 15% of 5th graders were sexually active. About half of the high school students surveyed claimed to be sexually active, and 20% said they had intercourse at last once a week.

While teenage sexual activity in the United States is no different from other countries, the United States has the highest rate of teenage pregnancy among the western industrialized nations — twice as high as Canada, Great Britain, and France, and nearly five times higher than the Netherlands.

Georgia is one of eight states that have had high increases in teenage pregnancy since 1986. Georgia now ranks 49th among the states in the rate of live births to teens, ages 15-17. In 1990, there were 28,290 teen pregnancies in Georgia. Of these,

18,847 (67%) were to school age teens, age 17 and under.

The public cost of teenage childbearing is staggering. The University of Georgia Extension Service estimated in 1988 that the single year cost for each teen birth was \$13,418 just for the cost to Aid to Families with Dependent Children (AFDC), food stamps, and Medicaid. Such other costs as newborn intensive care, special education, etc. are not included. The single year cost formula includes the public costs for families currently headed by teen mothers and the families of previous teen mothers who have a child currently under 21 years of age. The Extension Service has a prorated formula that declines the average costs for these older families. Applying the Extension Service's formula to the 1990

live births would give an estimate of \$379 million for the public costs of teenage childbearing in 1990.

The Southern Governors' Association and the Southern Legislative Conference recommend approaches that prevent children from becoming "at-risk" in the first place and keeping those youths who are already "at-risk" from becoming parents in the adolescent years. They conclude that "prevention is our best hope of ending this epidemic and helping our children grow up before they have children on their own. Our goal should be to reduce risks by building opportunities for children and their families."

Who are these children who are at-risk? Recent studies indicate that there is a relationship between school failure, juvenile delinquency, substance abuse and teenage pregnancy. A study of 12-16 year olds revealed that sexually experienced girls were five times more likely to have been suspended from school than those who never had sex and the experi-

Phyllis Schwartz is the Director of the DeKalb County Teenage Pregnancy Task Force. The Task Force was established by the Chief Executive Officer of DeKalb County in 1985 and since 1987 has been a program unit of the DeKalb County Commission. This article is adapted from a talk delivered at an all day conference on teenage pregnancy prevention sponsored by the DeKalb Medical Center, DeKalb Medical Society and the Auxiliary to the DeKalb Medical Society.

enced girls were 10 times more likely to have used marijuana. Boys who had sexual experiences were 6 times more likely to have used alcohol and 10 times more likely to have been in a car with a drug-using driver. Girls who had sex were 6 times more likely to have attempted suicide. It is interesting to note that girls with no sexual experience had significantly higher self-esteem.

Success in school is central for good self-esteem for youth. Among at-risk youth, low self-esteem can lead youth toward experimentation with behaviors that provide instant gratification such as substance abuse, early sexual activity, and even delinquent acts. The common predictors of teen pregnancy, juvenile delinquency, substance abuse, and dropping out of school include experiencing academic failure, having little support from or bonding with parents, being poor, and being heavily influenced by peers who engage in dysfunctional behaviors.

School systems are well positioned to identify youth at risk. Every 6 weeks, schools know which students are experiencing academic failure. They know the students who are chronically absent or late to school. The number of free and reduced price lunches and Chapter 1 programs make schools aware which children live in low income families. Teachers and counselors can observe those children who are "heavily influenced" by their peers. They can also be aware of which children have teen mothers or older siblings who become teen mothers, both of which are high predictors for teenage pregnancy.

In addition to schools, physicians and other agencies that serve youth and their families have an equal responsibility in this risk identification. Pediatricians and family physicians often see the teen without the parent in the office, and this provides a golden opportunity



to explore what is actually happening in the teen's life. Are they sexually active or thinking about becoming sexually active? Do they need contraceptive information? Do the young women need a referral to a gynecologist? It's a good time to explain the dangers of early sex from a medical standpoint and to answer questions. At a minimum, the physician should establish trust and show supportive concern so that the teen will feel comfortable to come back at a later time with a problem or question.

The causes of teenage pregnancy are very complex. Therefore, a variety of approaches are required to prevent first pregnancies. Six strategies targeted toward youth can make a difference.

- Helping parents to be involved. Parents should be the primary educators of their children in terms of values and for sex education. We need to help parents be less embarrassed about talking to their children about sex. Physicians can play an important role in helping parents in this area.
- Age appropriate family life education, K-12, including decision-making skills and refusal skills for boys and girls. In order to avoid a pregnancy,

teens, both male and female, have to know how to prevent a pregnancy and then have the motivation to do so. There is no evidence that teaching teen reproductive facts results in more sexual activity and presumably more teen pregnancy and sexually transmitted diseases (STD). On the contrary, Georgia's high rates of teen pregnancy and teen STD gives evidence that the sex education curriculum in Georgia should be strengthened.

For those parents who have a concern about the sex education curriculum in the public schools, the sex education laws in Georgia provide that parents can exempt their children from instruction in this area. This provision allows complete choice for parents about their child's participation in this facet of the curriculum and at the same time ensures appropriate instruction for those children who may not receive any instruction at home.

Decision-making skills and refusal skills are equally important. Teens tell us they don't know how to say "no" without hurting their boyfriend or girlfriend's feelings. That is understandable, but we must help them develop these skills. The consequences of becoming pregnant, getting AIDS or other STDs are too great when compared to the choice of teaching students to say no gracefully.

- Mentoring and tutoring. Since self esteem is related to school success, it is apparent that teens who are having difficulty in school should get the tutoring they need to help them be successful. Similarly, mentors may be needed for youth who are likely to be heavily influenced by peer groups who engage in dysfunctional behaviors.
- After-school and summer programs for youth. We need to

SEX CAN BE A REAL SCREAM.



Teenagers who go all the way don't often go very far.
THE CHILDREN'S DEFENSE FUND.

be certain that our youth have constructive ways of spending their leisure time activity. A recent study of 230 parenting teens who were served in the Teenage Pregnancy and Parenting Program of the DeKalb Teenage Pregnancy Task Force revealed that 50% had become pregnant during the summer months.

- Programs that offer teens life skills training. Knowing what you want to do as an adult is the kind of motivation that is needed to help delay a pregnancy. Once teens have a goal, such as going to college or getting training to hold a good paying job, they can quickly see that becoming a mother or a father too soon will change that opportunity.
- Accessible and affordable contraception for teens, male and female. The laws of Georgia state that contraceptives cannot be distributed in any public school in Georgia. Yet we know that many teens are sexually active. This means that we must be certain that if

TEEN PREGNANCY PREVENTION

By Tish Lanier

THE CRISIS of teenage pregnancy in Georgia has not disappeared in the past 12 months. However, the A-MAG has made a terrific effort to introduce a spectrum of educational materials and programs to the county auxiliaries. It is our hope and expectation that the county auxiliaries will incorporate what is feasible and appropriate for their teens.

There are posters; there are forums; there are brochures; there are contacts and coalitions; and there is a play.

In talking with the dozens of teens that I have encountered this year, no one effort seems as stirring as Jerome McDonough's play, "Dolls."* It was presented at the A-MAG Winter Conference in Atlanta by the Avondale Performing Arts School. The audience consisted of the leadership from county auxiliaries, school principals, drama teachers, and other interested community leaders.

This very poignant play presented by high school students is

*"Dolls" is a copyrighted play by Jerome McDonough available through: I. E. Clark, Inc., P.O. Box 246, Schulenburg, TX 78956.

Dramatic black & white posters available through: Children's Defense Fund, 122 C. Street, NW, Washington, DC 20001.

appropriate for viewing by grades 5-12. It is upbeat, funny, sad, enlightening. It is students telling the reality of peer pressures, offering some clear, even refreshing, answers about teen pregnancy and its prevention. Hundreds of students in DeKalb County have had the opportunity to see "Dolls," and then discuss it in their classrooms. Several auxiliaries have arranged for performances in their counties next year, either with Avondale or their own high school drama departments.

It has become clear that young people need to know facts and choices earlier than parents, schools, and churches want to tell them. When the community admits the problem, and addresses it head-on as DeKalb has done, a difference can be made. The statistics have greatly improved in DeKalb. The best news is that those statistics have real names.

A-MAG has provided a start for its members. Let us make it our business to educate our young people before they are confronted with peer pressure and life-changing choices.

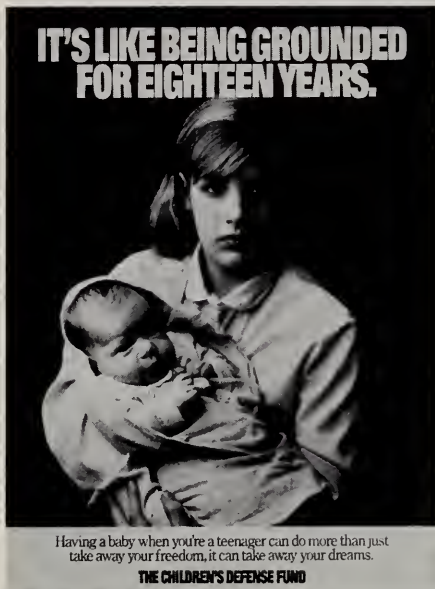
Mrs. Lanier is a member of the Auxiliary to the Medical Association of Atlanta and Chairman of the Teen Pregnancy Prevention Committee.

a teen has made a decision to be sexually active that he or she has the contraceptives that are needed to prevent pregnancy and a sexually transmitted disease, including AIDS.

Teens who do become mothers have an even higher risk of becoming pregnant again. These teen mothers require several other supports to help prevent the second pregnancy, such as educational

programs that recognize the special needs of teen parents and counseling and support programs. School or neighborhood-based child care is essential. In order to complete her education or be trained for self-sufficiency, a teen must have a safe place for her child. At the same time, the child care provider can assist the teen with needed parenting skills.

The Southern Governors' Associ-



ation and the Southern Legislative Conference suggest that "every sector of the community has a stake in the success of teenage pregnancy prevention measures and a role to play in implementing them." This includes teens, families, schools, religious congregations, businesses, youth serving agencies and professionals. Health and human service agencies and professionals and the media must become involved in Georgia's effort to reduce teenage pregnancy.

The following list illustrates how various segments of the community can contribute to preventing teenage pregnancy:

- Among the many groups that can help parents be involved are schools, PTAs, the religious community health providers, United Way agencies, and social service organizations.
- Schools as well as religious organizations, youth serving agencies, and recreation programs can provide family life education.
- Many groups can be involved in mentoring and tutoring such as schools, PTAs, religious organizations, United Way agencies, fraternities and sororities, service organizations, and businesses.
- Religious organizations, United Way agencies, youth serving agencies, child care providers, and recreation programs can provide after-school and summer programs for youth.
- Programs that offer teens life skills training can be provided by United Way agencies, the Chamber of Commerce Private Industry Councils, and businesses.
- Accessible and affordable contraception is the province of the health providers.

We can no longer ignore the problem of teenage pregnancy in Georgia. We must begin to address

the needs of our youth in our own communities. We must involve our youth in our plans and ask them to help us identify ways in which the community can be supportive of them. Schools, physicians and youth serving agencies must take the time to identify the children who are at risk. If we cannot help their parent(s) to be involved, then we must be certain that the at-risk teen gets the support services that have been identified so that the consequences and pitfalls of becoming a parent too soon can be avoided.

Local auxiliaries can be the catalysts who will solicit the concerns of the youth in their community and bring all the segments together to design specific strategies that will make a difference in each community. By working together in our own communities, we can help our youth grow to be productive and contributing members of society and at the same time improve the health status of youth in Georgia.

Bibliography

1. Bower D, Reinheimer R. Teen Childbearing: Public Costs in Georgia, 1988. The Cooperative Extension Service, The University of Georgia College of Agriculture, Athens, GA.
2. Adolescent Pregnancy In the South: Breaking the Cycle. A Report of the Southern Regional Project on Infant Mortality in cooperating with the Southern Governors' Association & Southern Legislative Conference, Washington, DC, May, 1989.

Meaning and Metaphor:

Highlights of MAG's 1992 Annual Meeting

THE FIRST GENERAL Session of the 138th Annual Meeting of the House of Delegates of the Medical Association of Georgia was called to order by President Cyler D. Garner, of Gordon, at 7 PM, Thursday, April 23, 1992, at the Holiday Inn Crowne Plaza, Atlanta. There were 142 Delegates and Alternates Delegates present, representing 31 component county medical societies. Howard Lang, MD, gave the Key-note Address Thursday evening.

Election Results

President-Elect

Roy W. Vandiver, of Atlanta, was nominated by Stan Sherman of DeKalb Medical Society. He had no opposition.

First Vice President

Gwynne T. Brunt, of Atlanta, moves to this seat automatically.

Second Vice President — (Opposed race)

Elizabeth Clark of Atlanta was nominated by Willis Lanier of Atlanta and seconded by the following members: Hugh Thompson of Atlanta, Billy Burke of Rome, and Don Campbell of Marietta.

Joy Maxey, of Atlanta, was nominated by Joseph P. Bailey, Jr., of Augusta along with the DeKalb Delegation and seconded by the following members: C. Emory Bohler

of Brooklet, Jack Menendez of Macon, Jeffrey Nugent of Atlanta, John Watson of Columbus, and Bill Jones of Gainesville.

Willard Quillian was nominated by James O'Quinn of Augusta and seconded by the following physicians: Al Car of Augusta, and L. T. Crimmins of Albany.

On Saturday morning the results of the election for Second Vice President are:

Primary: Joy Maxey — 95 votes; Elizabeth Clark — 67 votes; Willard Quilland — 41 votes. Run-Off: Joy Maxey — 113 votes; Elizabeth Clark — 93 votes.

Speaker of the House — (Opposed race)

Dan Stephens of Marietta was nominated by Catherine Andrews of Marietta and seconded by the following physicians: Joseph Bailey of Augusta, Jeffrey Nugent of Atlanta, William Collins of Atlanta, and Cyler Garner of Gordon.

Ralph Tillman of Norcross was nominated by Joe Nettles of Savannah and seconded by the following members: Rupert Bramblett of Cumming, Jack Menendez of Macon, James O'Quinn of Augusta, Hugo Moreno of Atlanta, Robert Burns of Dalton, Hugh Thompson of Atlanta and Joe Stubbs of Valdosta.

On Saturday morning the results of the election for Speaker of the House are:

Ralph Tillman — 127 votes; Dan Stephens — 76 votes

Vice Speaker of the House

Charles Lanford, of Macon, was nominated by Jack Menendez of Macon. This race was unopposed.

AMA Delegates

Carson B. Burgstiner, of Savannah, was nominated by Dent Purcell, of Savannah. S. William Clark, Jr., of Waycross, was nominated by Spurgeon W. Clark, III, of Waycross. Joe C. Stubbs, of Valdosta, was nominated by Louis Felder, of Atlanta.

AMA Alternate Delegates

E. M. Molnar, of Columbus, was nominated by Lavon Thurman, of Columbus. Ralph A. Tillman of Norcross, was nominated by Emory Bohler, of Brooklet. Ellis B. Keener of Gainesville was nominated by John Watson of Columbus.

Young Physician Section

AMA Delegates: Glenn Carter, Statesboro, Rober Tucker, Atlanta

AMA Alternate Delegates: C. Alan Woods, Valdosta, Ben Cheek, Columbus

Judicial Council

John Bates of Cuthbert was ap-

pointed to the Judicial Council for a 5-year term of office.

Newly Elected for Offices are:

Roy W. Vandiver, President Elect
Charles A. Lanford, Vice-Speaker of the House

Joy A. Maxey, 2nd Vice President
Ralph A. Tillman, Speaker of the House

Carson Burgstiner, AMA Delegate
S. William Clark, Jr., AMA Delegate

Joe C. Stubbs, AMA Delegate
E. M. Molnar, AMA Alternate Delegate

Ralph A. Tillman, AMA Alternate Delegate

Ellis B. Keener, AMA Alternate Delegate

Gwynne T. Brunt, Jr., First Vice President

Young Physician Section

Delegates to the AMA: Glenn Carter, Robert Tucker

Alternate Delegates to the AMA:
C. Alan Woods, Ben Cheek

The official attendance figures for the 138th House of Delegates are:

Delegates: 209

Alternate Delegates: 6

Members: 33

Guests: 33

Auxiliary: 134

Total Registration: 415

County Representation: 36

Reference Committee A

Report of the President

Adopted Recommendation 1 as amended by substitution: "that the House of Delegates instruct the Board and the Executive Committee to develop a conflict of interest policy for MAG members who serve on either the Board of Directors or the Executive Committee and that this proposed policy be presented to the 1993 MAG House of Delegates for adoption."

Adopted Recommendation 2 as amended: "that the House direct the president to appoint an Ad Hoc Committee on Organized Medicine. The purpose of the committee is to study all aspects of organized medicine to determine our role in the future. The committee would look at MAG, its component county medical societies and specialty societies and that this Ad Hoc Committee report its findings and recommendations to the 1993 MAG House of Delegates."

Report of the Board of Directors

Adopted revised HIV policy as outlined in report and advises that the Board of Directors be directed to develop a definition of the "qualified panel of physicians" with which the physician should consult

and that the MAG seek appropriate legislation to accomplish the objectives outlined in this policy. Copies of this policy are available upon request.

Emergency Medical Services Committee

Adopted with commendation the recommendation: "that MAG fully support efforts to organize a program of medical disaster management and emergency care in the State of Georgia," and further directed "that the MAG emphasize to the appropriate state officers the necessity for adequate state funding of a statewide disaster plan including full implementation of the medical component."

Ad Hoc Publications Advisory Committee

Adopted Recommendation 5 as amended: "Incorporate the Auxiliary as a regular feature in the *Journal of the Medical Association of Georgia*."

Adopted Recommendation 6: "Structure the MAG *Directory* as a utilitarian source of reference material to included specialty designation, address and telephone number."

Introducing the Okefenokee Medical Society (Resolution 10)

Adopted: "RESOLVED, that the House of Delegates of the MAG approve the change in name from Ware County Medical Society to Okefenokee Medical Society."

Recycling (Resolution 16)

Adopted first and second resolves: "RESOLVED, that MAG urge all of its members to practice basic recycling in their homes and offices;" and be it further

"RESOLVED, that the MAG administrative office continue to recycle whenever possible."

Did NOT adopt the third resolve: "RESOLVED, that one of MAG's public service announcements be aimed directly at urging the expansion of recycling efforts throughout our state."

Student Membership Application Processing (Resolution 38)

The first and second resolves stated: "RESOLVED, that if a student application is not processed by the appropriate local county medical society within ninety (90) days, the Medical Association of Georgia may process the application;" and be it further

"RESOLVED, that the Medical Association of Georgia headquarters office will directly bill and receive annual student dues."

The first and second Resolved portions were referred to a committee which shall include a student representative from each of the four Georgia medical schools, to facilitate the mechanics of obtaining membership in the Medical Association of Georgia, and that this Committee be requested to report its findings and recommendations to the MAG Executive Committee and the Board of Directors within ninety days.

Adopted the third Resolve with commendation: "That a student membership recruiter will be appointed annually be each medical school and the Medical Association

of Georgia will send a list of delinquent student members to these recruiters at least twice annually."

Memorial Resolutions (Resolutions 2, 3, 7, & 39)

Adopted these Resolutions honoring Drs. Ron Isaacson, R. Lester Neville, John B. Raburn, and Jack Alanson Raines.

Reference Committee B

Maternal and Infant Health Care Committee

Adopted Recommendation 1: "That the MAG support outreach efforts for maternal and infant care to increase early registration for prenatal care."

Adopted Recommendation 3: "That increased liaison between the MAG, appropriate divisions of the Georgia Department of Human Resources, the Georgia Maternal and Infant Health Council and the Department of Medical Assistance (Medicaid)."

Occupational Health Committee

Adopted as amended: "That MAG conduct a survey of fees established by Worker's Compensation Boards in other states."

Abolition of the Data Bank (Resolution 6)

Adopted the first and second resolves as amended: "RESOLVED, that MAG strongly *endorse and support* the AMA's call for the abolition of the National Practitioner Data Bank (AMA Interim meeting, December, 1991, Las Vegas); and

"RESOLVED, that MAG proposes that the Federation of State Medical

Boards, through their existing data collection methods, serve as the proper medium through which information is distributed to the state medical boards for the disciplining and policing of our profession; therefore, assuring the highest quality of health care for our patients."

HIV and Tuberculosis (Resolution 19)

Adopted the following substitute: "RESOLVED, that MAG commend Dr. Frank Houser and the Division of Public Health, Georgia Department of Human Resources for the action taken to address the problem of TB in our state through appointment of an expert planning committee."

Physicians Active Role in Health Reform System (Resolution 28)

Referred to MAG Board of Directors for referral to an appropriate MAG committee for study.

"RESOLVED, that this House ask the Board of Directors to direct the Access the Medical Care Committee and the Medical Practice Committee to jointly evaluate the use of the Georgia Health Network as a

mechanism to participate in this 'reform.'"

Portability of Health Insurance (Resolution 29)

Did NOT adopt as amended: "RESOLVED, that Health Access America add to its proposal a recommendation for portability of health insurance."

Financing Long-Term Care Through Health IRAs (Resolution 30)

Adopted as amended: "RESOLVED, that the Medical Association of Georgia's AMA Delegation submit a resolution to the AMA House of Delegates recommending Health IRAs as a method of financing long-term care."

Physicians Guide for Managing Health Delivery Systems (Resolution 36)

Referred the second Resolve portion to the Board of Directors for study and appropriate action.

"RESOLVED, that measures be taken to pass on the initial and continuing costs of this service (physician guide on managed health care delivery system) to the data management companies doing business in Georgia."

Modification to the Drug Abuse Office and Treatment Act of 1972 (Resolution 41)

Did NOT adopt: "RESOLVED, that the Medical Association of Georgia request by Resolution that the American Medical Association support the Federation of State Medical Boards proposal permitting immediate access by state medical licensing boards to the medical records of drug or alcohol patients who are applicants or licensees

without the consent of such applicant or licensee."

Electronic Claims Processing (Resolution 44)

Adopted as amended: "RESOLVED, that MAG seek introduction of legislation requiring the health insurance companies which accept paper health insurance claim forms from patients or providers in the State of Georgia shall be required to accept direct transmission of electronic claims, in a uni-

form format at no charge to providers, by July 1, 1994."

Relations Between Hospitals and Physicians (Resolution 46)

Adopted both Resolves: "That MAG work toward both the clarification of common goals and resolution of conflicts between hospitals and physicians;" and "That the Hospital Medical Staff Section is the appropriate vehicle for achieving these ends."

Reference Committee C

Council on Legislation

Adopted with commendation Recommendation 1: "That MAG continue to develop and communicate a positive, pro-active legislative agenda focused on the delivery of the highest reasonable quality of patient care and the protection of a physician's role in the health care system."

Adopted with commendation Recommendation 2: "That the physicians of Georgia actively involve themselves in the continuing education of Georgia's legislators and other public officials on issues involved with health care policy. No citizen is better qualified to educate a public official on complex health care issues."

Adopted with commendation Recommendation 3: "That MAG continue to urge every member and auxilian to be a member of GAMPAC."

Adopted with commendation Recommendation 4: "That Mrs. Carolyn Moon, Mrs. Anna Kathryn Brown, Mrs. Anita Eidex, and Mrs. Cheri Dennis, and the Auxilians who participated so effectively in the 1992 Phone Bank be highly

commended for their vital contribution to MAG's legislative effort."

Adopted with commendation Recommendation 5: "That all members of the Auxiliary who participated as Phone Bank volunteers be written thank you letters by the Legislative Council Chairman."

Adopted with commendation Recommendation 6: "That the Physician Involvement Program (PIP) continue its essential role in the legislative process by encouraging increased participation among members and the Auxilians."

Adopted with commendation Recommendation 7: "That every component medical society establish a Legislative Committee, if it has not already done so."

Adopted with commendation Recommendation 8: "That each component medical society's legislative community be responsible for bringing a group of physicians to the Capitol to participate as a group in the PIP Program at least once during the 1993 General Assembly."

Adopted with commendation Recommendation 9: "That Continuing Medical Education credit hours

be awarded to those doctors attending the Medical Association of Georgia's Leadership Conference or attending the Medical Association of Georgia's Legislative Seminar. That this House recognize that the public policy issues discussed at these meetings are of vital importance to the continued delivery of quality health care to the citizens of Georgia."

Adopted as amended Recommendation 10: "That the Composite State Board of Medical Examiners be urged to take any and all steps necessary to assist the Insurance Commissioner in the implementation of the Utilization Review Regulation Act."

Adopted with commendation Recommendation 11: "That the Composite State Board of Medical Examiners be urged to take any and all steps necessary to assist the Insurance Commissioner in the development of the 'Model Basic Health Insurance Plan.'"

Adopted as amended Recommendation 12: "That each component medical society's legislative committee sponsor at least one function for its physicians and local

legislators before the convening of the 1993 General Assembly."

Adopted with commendation Recommendation 13: "That the Legislative Council urge MAG membership and Auxilians to participate in campaign activities during the 1992 election year."

Adopted with commendation Recommendation 14: "That MAG sponsor trips to Washington, D.C., by physician groups, at the physicians' expense, for the purpose of conveying our concerns about health care legislation to our Congressional Delegation."

Maternal and Infant Health Committee

Adopted Recommendation 2: "That the MAG support increased Medicaid services for pregnant women and children to 150% of the federal poverty level."

Elimination of Extrapolation Method in Medicare/Medicaid Physician Audits (Resolution 4)

Adopted as amended: "That MAG urge the AMA to vigorously pursue all avenues, including support of Congressman Rowland's HR2695 and other legislative relief, to eliminate the extrapolation method in physician Medicare audits; That MAG urge the Secretary of Health and Human Services to move immediately to appoint and convene the fifteen-member commission required by Congressman Rowland's Anti-Hassle I legislation passed last year."

Firearms Accountability (Resolution 8)

Adopted as amended: "That the House of Delegates endorse the concept of safe storage of firearms in an attempt to protect children and other innocent persons from the irresponsible actions of others."

National Epidemic of Firearms Related Death and Injury (Resolution 25)

Filed: "That since the benefits of

firearm availability are almost entirely intangible and the risks are substantial, that the efficacy of restrictive laws in influencing deaths from firearms seems established, we must now view gun-related deaths as not only a social problem but a medical problem as well; That we, as physicians, should acknowledge that the epidemic of injuries and deaths from firearms consumes their time and expertise, particularly if they practice in the inner cities, and drains resources from other critical health needs; That we, the members of the Medical Association of Georgia, should speak out and be counted as we did in the campaign against cigarettes, educating the public and bringing pressure on local, state and national legislators to act and pass legislation limiting the private ownership of handguns and automatic rifles."

Liaison and Promotion of National Federation of Independent Business and AMA (Resolution 9)

Adopted as amended: "That the Medical Association of Georgia and the American Medical Association investigate a liaison with the National Federation of Independent Businesses and similar organizations for the purpose of promoting cost effective, quality health care."

Self-Referral Legislation (Resolution 14)

Referred to the Executive Committee: "MAG defend the physician's option to refer patients to a facility in which they have ownership;" and "that a decision to refer should be based on the physician's clinical judgment and not on the discriminatory rules and regulations promulgated by state and federal governments."

Unqualified Insurance Consultants (Resolution 15)

Adopted as amended: "That the MAG go on record as opposing insurance claim denials by consul-

tants who are not licensed to practice medicine, that is non-M.D.s and non-D.O.s;" and "That this policy be disseminated to all companies offering health insurance in the State of Georgia and to the Insurance Commissioner;" and "That appropriate legislation be introduced to effect this change in the insurance code."

Health Reform (Resolution 18)

Adopted with commendation: "That the Medical Association of Georgia urge the State Health Strategies Council to reject any and all proposals which call for greater governmental involvement in medicine and/or which do not build upon the system's current strengths in developing solutions to current problems."

Payment Credit for Screening Procedures (Resolution 23)

Referred to the Third Party Payors Committee: "That MAG support legislative efforts to encourage insurers to give a credit for payment of screening procedures and that the credit be applied to reduce the subsequent periodic insurance premium."

Attorneys' Requests For Medical Records (Resolution 24)

Adopted by substitution: "That the Medical Association of Georgia recommends that physicians request specificity as to subject matter and scope from attorneys seeking to obtain medical records involved in litigation."

Medical Services at Youth Detention Centers (Resolution 31)

Adopted by substitution: "That the Medical Association of Georgia should work closely with the newly established Georgia Department of Children and Youth to insure adequate and appropriate medical, psychological and basic health ser-

vices for individuals detained in Georgia's Youth Detention Centers."

Cost of Medically Related Service and Supplies (Resolution 32)

Adopted as amended: "That the MAG and the AMA legislative or other appropriate department seek a requirement that HCFA and/or their contracted home health agencies, durable medical equipment suppliers, and non-emergency transportation services provide cost estimates to physicians to be provided along with the physician authorization form."

Drug Company Direct Patient Advertising (Resolution 37)

Filed: That MAG encourage pharmaceutical companies to discontinue direct patient advertising of prescription pharmaceutical products."

Medicaid (Resolution 40)

Adopted as amended: "That MAG work through both legislative and administrative avenues with the Georgia Department of Medical Assistance and the Georgia General Assembly to reduce the administrative burden for physicians treating Medicaid patients, so as to remove bureaucratic impediments to physician participation in the program."

Proposed Basic Health Care Insurance Policy (Resolution 43)

Adopted: "That the House of Delegates review the Basic Model Health Insurance Policy to ensure that the final product provides adequate, yet affordable coverage for the currently uninsured;" and "That the President of MAG appoint an Ad Hoc Basic Health Care Committee to monitor the development of the Georgia Department of Insurance

"model" policy and to make recommendations to the Executive Committee and the Board of Directors concerning the model policy."

Medicare Fee Disparities Against New Physicians (Resolution 45)

Adopted: "That MAG make it priority to advocate passage of S. 2362 and H.R. 4507 to repeal inequitable Medicare payments for "new physicians" and actively seek cosponsors for this legislation;" and "That the MAG Delegation to the American Medical Association House of Delegates submit a resolution at the 1992 Annual Meeting asking the AMA to support pending legislative initiatives S. 2362 and H.R. 4507;" and "That the MAG and the AMA continue their efforts to advocate Medicare funding at a level reflecting the equitable restoration of payments to new physicians."

Reference Committee D

Report of the President

Adopted Recommendation 3: "That the House encourage more educational programming by the MAG."

Adopted Recommendation 4: "That MAG cooperate with existing programs in the state that deal with issues involving domestic violence, child abuse, infant mortality, immunization of children and AIDS education. I further recommend that MAG, where possible, in publications and other means, use the term AIDS disease when talking about AIDS, with the hope that we can begin to teach the public that AIDS is a disease and not a social issue."

Adolescent Health Committee

Adopted Recommendation 1: "That MAG join efforts with AMA and other organizations concerned

with adolescent health."

Adopted with commendation Recommendation 3: "That MAG appoint a special committee of MAG members and auxiliary members whose only focus would be the 'Growing Healthy' issue."

Adopted the following substitute for Recommendation 4: "That MAG should work with the Georgia Department of Education in classifying the Attention Deficit Disorder as a learning disorder as well as a medical disorder."

Clean Air (Resolution 13)

Adopted the following Resolves: "That the MAG support the enactment of public smoking restrictions and urge local medical societies to become active in educating their communities about the health hazards of secondhand smoke;" and "That the Medical Association of

Georgia also encourage businesses and individuals to provide smoke free environments for their employees and families."

Violent Crime (Resolution 27)

Adopted with commendation the following Resolves: "That MAG emphatically and publicly declare its concern with the rising violent crime rate in our Georgia communities;" and "That MAG support this Resolution in the following manner:

"A: By publicly voicing, through the news media, the shared concern of Georgia's medical profession with the unrelenting problem of violent crime in our communities.

"B: By formally inviting the participation of other professional, civic and service organizations in this undertaking.

"C: By directly communicating this concern to the appropriate public officials.

"D: By urging its members to actively support our civic anti-crime organizations and the police departments of our communities.

"E: By thoroughly investigating other methods by which the membership might participate in anti-crime activities (for example, through the school systems).

"F: By appointing a Committee on Violent Crime as a working body to help achieve the aims as stated above."

Football Practice (Resolution 33)

Adopted the following substitute Resolution: "That the Medical Aspects of Sports Committee of MAG study the issues of hyperthermia, dehydration, and other sports related injuries, as well as appropriate education of coaches and training personnel in high school

athletics, and report back at the 1993 House of Delegates meeting."

Animal Rights (Resolution 34)

Adopted as amended: "That MAG make available information to all component medical societies and medical schools concerning availability of appropriate resource materials to provide factual information to the media and the public to confront the distortions concerning medical use of laboratory animals presented by many animals rights activist groups."

Destruction of the Ozone Layer (Resolution 35)

Adopted as amended: "That the Medical Association of Georgia actively support the ongoing efforts to reduce the destruction of the ozone layer by requesting that the United States of America follow the lead of Germany in stopping the production of ozone-destroying chemicals (CFCs) by 1995 and that they ac-

tively try to remove safely, all CFCs presently in use in this country, and that this crisis level of concern be transmitted to the President of the United States, all candidates for President of the United States, the Governor of Georgia, Georgia Congressmen and State Legislators."

Gifts to Physicians from Industry (Resolution 42)

Adopted as amended the first Resolved portion: "That the Medical Association of Georgia House of Delegates urges all Medical Association of Georgia members and all non-member physicians to comply with the American Medical Association policy on gifts to physicians from industry."

Adopted as amended the second Resolved portion: "That the Annotated Guidelines on Gifts to Physicians from Industry be published by MAG at some time in the future for its members."

Reference Committee F

Adolescent Health Committee

Adopted Recommendation 2 with commendation: "That MAG provide funds to establish a pilot project in a school to incorporate the 'Growing Healthy' curriculum. Fiscal note: \$22,000."

Membership Expansion & Involvement Committee

Adopted as amended: "That a 3-year dues payment plan be established for residents, at the rate of \$75.00 for a 3-year membership."

Public Relations Committee

Adopted as amended: "That a total of \$100,000 be allocated to the Public Relations Committee for their 1992-93 projects, to be disbursed at their discretion."

Survival of the MAG Journal (Resolution 5)

Adopted "RESOLVED, that MAG uses the *Journal* to promulgate bold idea to incite more physicians into political action and medical dialogue for the betterment of our patients and our profession; and be it further RESOLVED, that MAG assess the budget carefully, as always, but structure the allocation of resources and finances as to preserve the high quality and superb content of the material to which we have been accustomed in the *Journal*."

Ad Hoc Publications Advisory Committee

Adopted Recommendation 1: "Continue the present publications

of MAG and adequately fund them for the time being" and Recommendation 7 "Consider issuing the Directory of MAG on alternate or less frequent years with supplemental inserts to be mailed annually to include changes in membership."

Adopted as amended Recommendation 2: "Proceed with the external evaluation of MAG management and functions that Mr. Shanor reported was in progress."

Considered Recommendations 3, 4, 8 together and adopted by substitution:

"That Charles R. Underwood, M.D., Editor of the *Journal* and Susan Johnson, Managing Editor of the *Journal* be commended for their outstanding work in producing the *Journal*;

"That the current Ad Hoc Publications Advisory Committee be disbanded with commendation for its excellent work and that the Chairman of the Board of Directors appoint an ad hoc committee on publications to evaluate the MAG publications with special emphasis on the *Journal* as to its purpose and function, means of generating additional advertising revenue, and the advisability of contracting with a managing publishing firm;

"That this ad hoc Board Committee develop a plan by which the *Journal* becomes self-sustaining within a 2-year period;

"That this Committee report to the Board of Directors on a quarterly basis; and that this Committee present a financial recommendation for FY 93-94 by the January, 1993 Board of Directors meeting."

Journal of the MAG (Resolution 26)

Adopted as amended: "RESOLVED, that the budget for the publication of *Journal of the Medical Association of Georgia* for fiscal year 1992-1993 be approved at \$180,000, and that the MAG-Newsletter and its \$30,000 Budget be integrated into the monthly MAG *Journal* and its Budget, and that the Editor and Managing Editor, with the assistance of the Editorial Board, be encouraged to continue

aggressive pursuit of cost containment measures and the attraction of additional revenue producing advertisers in the *Journal*."

Physician's Guide for Managing Health Delivery System (Resolution 36)

Referred Recommendation 1 to the Board of Directors for study and legal review, and that if such a guide is published, that all actions concerning the review and possible publication be completed within the current MAG budget.

Travel Expenses (Resolution 11)

Did not adopt: "That the Finance Committee limit travel reimbursement for AMA meetings to our AMA Delegates, AMA Alternates, our MAG President and limited MAG staff."

MAG Dues (Resolution 1)

Did not adopt: "That anyone who has been a member in good standing of the Medical Association of Georgia continuously for at least 25 years, may be eligible for dues exemption at age 65, upon request."

Report of Treasurer

Accepted for information.

Report of the Chairman of Board — Budget

Adopted as amended Exhibits I &

II of the FY 93 Budget as shown below:

Exhibit I Budget Recommendation for Fiscal Year Ending May 31, 1993

1. No dues increase should be necessary during FY 93. Dues and subscription fees should be as follows:

Membership Type/ Bill Class	FY93
Active Members:	
Active, full dues	\$450
Active, new in practice 2/3 off	\$150
Active, new in practice 1/3 off	\$300
Active, resident	\$25
Active, resident, 3-year membership	\$75
Associate Members	\$100
Student Members	
Student, 4-year subscription	\$5

Student members shall be charged an additional fee for the *Journal*, to be determined by the Board of Directors.

2. It is recommended that a balanced budget be submitted by the Finance Committee to the Board of Directors and by the Board of Directors to the House of Delegates.

Exhibit II

Medical Association of Georgia Budget Summary

	Proposed FY 1993 Budget	Inc (Dec) FY93 v FY92 Budget	FY 1992 Budget	Projected FY92
Revenue:				
Dues Revenue	\$2,372,264	\$0	\$2,372,264	\$2,372,264
Advertising Revenue	80,000	0	80,000	88,000
MAG Mutual Agreements	195,000	2,500	192,500	192,500
Scientific Assembly	52,000	52,000	0	440
Leadership Conference	24,000	5,000	19,000	14,000
<u>Journal Subscriptions</u>	7,000	(500)	7,500	7,500
<u>AMA Refund</u>	13,000	(2,000)	15,000	13,000
Data Processing	6,500	0	6,500	6,500
Interest Income	55,000	(33,000)	88,000	55,000
<u>Rental Income</u>	31,000	(12,500)	43,500	32,000
<u>Miscellaneous Income</u>	31,269	(51,966)	83,235	45,000
Workshops	40,000	40,000		115,000
Legislative Seminar Sponsors	10,000	10,000		10,000
Exhibits & Sponsorships	25,000	13,000	12,000	20,000
GA Physicians Well-Being Com	50,000	50,000		50,000
Community Awareness Program		0		29,000
Total Revenue	<u>2,992,033</u>	<u>72,534</u>	<u>2,919,499</u>	<u>3,050,204</u>
Expenditures:				
Administration	1,852,608	86,777	1,765,831	1,757,192
Membership Services	257,100	(4,000)	261,100	259,443
<u>Building</u>	115,000	(14,000)	129,000	114,000
Journal	180,000	30,000	150,000	150,000
Depreciation	80,085	8,000	72,085	72,085
Board Contingent	20,000	0	20,000	20,000
Committees	<u>487,240</u>	<u>34,790</u>	<u>452,450</u>	<u>605,510</u>
Total Expenditures	<u>2,992,033</u>	<u>141,567</u>	<u>2,850,466</u>	<u>2,978,230</u>
Revenue Over Expense				
Regular Operations	<u>\$0</u>	<u>(\$69,033)</u>	<u>\$69,033</u>	<u>\$71,974</u>

Exhibit II

Medical Association of Georgia Budget Summary

	Proposed FY 1993 Budget	Inc (Dec) FY93 v FY92 Budget	FY 1992 Budget	Projected FY92
Administration Expenses:				
Salaries	\$1,216,855	\$82,816	\$1,134,039	\$1,134,039
Health Insurance	148,333	349	147,984	147,984
Disability Insurance	4,533	186	4,347	4,347
FICA Tax	76,159	6,967	69,192	69,192
Unemployment-State	2,259	2,120	139	5,000
Unemployment-Federal	1,526	0	1,526	1,526
Retirement	88,543	8,839	79,704	79,704
Legal Fees	20,000	(10,000)	30,000	15,000
Telephone & Telephone Equip.	43,000	1,000	42,000	42,000
Postage	10,000	(10,000)	20,000	12,000
Staff Travel	55,000	1,500	53,500	55,000
Printing	5,000	0	5,000	5,000
Dues & Subscriptions	12,000	2,000	10,000	15,000
Audit, Tax & Payroll	33,000	0	33,000	33,000
Equip. Maintenance & Xerox	15,000	(3,000)	18,000	15,000
Pension Administration	5,000	0	5,000	5,000
Consulting & Temporary Help	6,000	0	6,000	6,000
Office Supplies & Other	26,000	0	26,000	26,000
Income Taxes	17,000	(1,000)	18,000	18,000
Insurance	20,000	4,500	15,500	15,500
DP Equipment Main & Software	7,500	3,500	4,000	10,000
DP Supplies	5,000	(3,000)	8,000	8,000
DP Consulting Fees	5,000	0	5,000	5,000
DP Office Operations	5,900	0	5,900	5,900
President Provisional Fund	24,000	0	24,000	24,000
Total Administration	<u>\$1,852,608</u>	<u>\$86,777</u>	<u>\$1,765,831</u>	<u>\$1,757,192</u>
Building Expenses:				
Building Maintenance	\$19,000	\$1,000	\$18,000	\$18,000
Janitorial Service	19,000	0	19,000	19,000
Insurance	6,000	0	6,000	6,000
Utilities	41,000	0	41,000	41,000
Ad Valorem Tax	30,000	(15,000)	45,000	30,000
Total Building	<u>\$115,000</u>	<u>(\$14,000)</u>	<u>\$129,000</u>	<u>\$114,000</u>

Exhibit II

Medical Association of Georgia Budget Summary

	Proposed FY 1993 Budget	Inc (Dec) FY93 v FY92 Budget	FY 1992 Budget	Projected FY92
Membership Expenses:				
Annual Session	\$84,000	\$14,000	\$70,000	\$88,000
Travel-President	12,000	(3,000)	15,000	15,000
Travel-President Elect	7,000	(1,000)	8,000	6,000
Travel-Past President	4,000	(2,000)	6,000	5,000
Travel-AMA Delegates	36,000	(8,000)	44,000	40,000
Caucus Expenses	15,500	(4,500)	20,000	16,000
Executive Committee Provisional	5,000	0	5,000	5,000
Executive Committee Travel	20,000	(2,000)	22,000	20,000
Board Meetings	18,000	(4,000)	22,000	18,000
President Executive Fund	14,000	0	14,000	14,000
Medical Student Section	8,000	(5,000)	13,000	13,000
Resident Physician Section	5,000	960	4,040	4,040
Young Physician Section	8,600	(4,460)	13,060	8,600
Membership	20,000	15,000	5,000	6,803
Total Membership	<u>\$257,100</u>	<u>(4,000)</u>	<u>\$261,100</u>	<u>\$259,443</u>
Journal Expenses:				
Printing	\$104,600	(\$2,682)	\$107,282	\$122,303
Photo Processing	1,000	900	100	600
Advertising Promotion	2,500	0	2,500	1,100
Postage	20,000	0	20,000	9,750
Clipping Service	500	69	431	660
Dues & Subscriptions	400	100	300	300
Consulting Services	10,000	0	10,000	10,000
Artwork	6,800	300	6,500	2,500
Travel	2,700	1,700	1,000	1,400
Editorial Board Meeting	0	(387)	387	387
Office Operations	1,500	0	1,500	1,000
Newsletter Budget Allotted to Journal	21,000			
All-Member Newsletter Mailings	9,000			
Total Journal	<u>\$180,000</u>	<u>\$0</u>	<u>\$150,000</u>	<u>\$150,000</u>
Depreciation Expenses:				
Deprecation-Building	\$21,000	\$7,000	\$14,000	\$18,900
Depreciation-Equipment	19,000	1,000	18,000	15,800
Amortization-Phone	11,085	0	11,085	11,085
Depreciation/Amortization	29,000	0	29,000	26,300
Total Depreciation	<u>\$80,085</u>	<u>\$8,000</u>	<u>\$72,085</u>	<u>\$72,085</u>

Exhibit II

Medical Association of Georgia Budget Summary

	Proposed FY 1993 Budget	Inc (Dec) FY93 v FY92 Budget	FY 1992 Budget	Projected FY92
Committees Expenses:				
<u>Access to Health Care</u>	\$1,500	(\$200)	\$1,700	\$1,706
<u>Aux.-Teen Health Forums</u>	0	0	0	0
<u>Auxiliary</u>	22,225	(275)	22,500	22,500
Adolescent Health	22,000	22,000		
Doctor-of-Day	10,000	0	10,000	10,000
Emergency Medicine	0	0		
Environmental	0	0		500
<u>Hospital Medical Staff</u>	1,000	(9,000)	10,000	10,000
<u>GA Physicians Well-Being</u>	50,000	(5,000)	55,000	55,000
Leadership Conference	22,550	3,550	19,000	24,000
Legislation	120,000	15,000	105,000	110,000
Legislative Seminar	35,000	0	35,000	47,425
Legislative Bulletin	40,000	0	40,000	40,000
Maternal & Infant Health	1,500	1,500		
<u>Medical Aspects of Sports</u>	1,200	(1,000)	2,200	1,047
<u>Medical Practice</u>		(700)	700	700
Medical Schools	2,000	1,000	1,000	2,000
<u>Newsletter</u>	*	(41,000)	41,000	41,000
<u>Physicians Involvement Program</u>	1,000	0	1,000	3,000
<u>Public Health</u>	1,500	(1,000)	2,500	1,500
Clinicians Guide to AIDS		0		19,282
Public Relations	100,000	9,800	90,200	116,900
Scientific Assembly & CME	47,765	44,115	3,650	3,950
RBRVS/Medicare Seminars		0		85,000
<u>Third Party Payors</u>	8,000	(4,000)	12,000	10,000
Total Committees	<u>\$487,240</u>	<u>\$34,790</u>	<u>\$452,450</u>	<u>\$605,510</u>

Bold Type-Increase from FY92 Budget

Underlined Type-Decrease from FY92 Budget

*House of Delegates Action—Newsletter integrated into the Journal.

DISTRIBUTION OF EXPENDITURES BY FUNCTIONAL AREA

 HeadcountFY92.....				
	#	%	Salary & Benefits	Line Item Budget	Overhead Allocation	Total	% of Expense
ADMINISTRATION	7.00	25.9%	416,043	549,665	(965,708)	(0)	
Legislative:	5.80	21.4%	421,489	105,000			
Legis Bulletin				40,000			
Legis Seminar Exp				35,000			
Doctor-of-Day				10,000			
Phy Involvement Pgm				1,000			
LEGIS TOTAL			421,489	191,000	279,357	891,846	31.3%
JOURNAL	1.50	5.5%	63,756	150,000	72,247	286,003	10.0%
Auxiliary	2.00	7.4%	75,686	22,500			
Teen Health Forums				0			
Adolescent Health				0			
AUXILIARY TOTAL			75,686	22,500	96,330	194,516	6.8%
Medical Issues	2.75	10.2%	142,390				
Access to Health Care				1,700			
Emergency Medicine							
Environment & Medicine							
Hospital Medical Staff				10,000			
Maternal & Infant Health							
Medical Aspects of Sports				2,200			
Medical Practice				700			
Public Health				2,500			
Third Party Payors				12,000			
MED ISSUES TOTAL			142,390	29,100	132,454	303,944	10.7%
Education & Meetin	3.00	11.1%	98,343				
Leadership				19,000			
Medical Schools				1,000			
Scientific Assbly & CME				3,650			
EDUCATION TOTAL			98,343	23,650	144,495	266,488	9.3%
Public Relations	1.50	5.5%	61,170	90,200			
Newsletter				41,000			
PR TOTAL			61,170	131,200	72,247	264,618	9.3%
Speciality Societi	2.00	7.4%	99,205				
GA Physicians Well Being				55,000			
SPEC SOC TOTAL			99,205	55,000	96,330	250,535	8.8%
Membership	1.50	5.5%	59,170	5,000			
Annual Session				70,000			
President Travel				15,000			
Pres Elect Travel				8,000			
Past President Travel				6,000			
Board Meetings				22,000			
Exec Committee Travel				22,000			
AMA Travel & Expenses				64,000			
Pres Executive Fund				14,000			
EC Provisional Fund				5,000			
Medical Student Section				13,000			
Resident Section				4,040			
Young Physician Section				13,060			
MEMBERSHIP TOTAL			59,170	261,100	72,247	392,517	13.8%
TOTAL EXPENDITURES	<u>27.05</u>	<u>100.0%</u>	<u>1,437,251</u>	<u>1,413,215</u>	<u>(0)</u>	<u>2,850,466</u>	<u>100.0%</u>

.....FY 93.....

Salary & Benefits	Line Item Budgets	Overhead Allocation	Total	% of Expenses	FY92 Line Item Budgets	FY93 Budget Requests	FY93 Finance Recomm.	Fin. Comm Increase (Decrease)
451,515	529,486	(981,001)	(0)		549,665	533,486	533,486	
456,085	120,000				105,000	140,000	120,000	(20,000)
	40,000				40,000	40,000	40,000	0
	35,000				35,000	45,000	35,000	(10,000)
	10,000				10,000	10,000	10,000	0
	1,000				1,000	2,750	1,000	(1,750)
456,085	206,000	283,781	945,866	31.6%	191,000	237,750	206,000	(31,750)
67,040	150,000	73,392	290,431	9.7%	150,000	191,400	150,000	(41,400)
79,584	22,225				22,500	23,425	22,225	(1,200)
	0				0	10,000	0	(10,000)
	22,000				0	22,000	22,000	0
79,584	44,225	97,855	221,664	7.4%	22,500	55,425	44,225	(11,200)
149,724	1,500				1,700	1,500	1,500	0
	0					34,000	0	(34,000)
	0					2,000	0	(2,000)
	1,000				10,000	1,050	1,000	(50)
	1,500					1,500	1,500	0
	1,200				2,200	2,200	1,200	(1,000)
	0				700	0	0	0
	1,500				2,500	1,500	1,500	0
	8,000				12,000	8,350	8,000	(350)
149,724	14,700	134,551	298,975	10.0%	29,100	52,100	14,700	(37,400)
103,408	22,550				19,000	22,550	22,550	0
	2,000				1,000	2,075	2,000	(75)
	47,765				3,650	47,765	47,765	0
103,408	72,315	146,783	322,506	10.8%	23,650	72,390	72,315	(75)
64,321	100,000				90,200	153,400	100,000	(53,400)
	30,000				41,000	30,000	30,000	0
64,321	130,000	73,392	267,713	8.9%	131,200	183,400	130,000	(53,400)
104,314	50,000				55,000	51,700	50,000	(1,700)
104,314	50,000	97,855	252,169	8.4%	55,000	51,700	50,000	(1,700)
62,217	20,000				5,000	20,000	20,000	0
	84,000				70,000	87,000	84,000	(3,000)
	12,000				15,000	15,000	12,000	(3,000)
	7,000				8,000	8,000	7,000	(1,000)
	4,000				6,000	6,000	4,000	(2,000)
	18,000				22,000	22,000	18,000	(4,000)
	20,000				22,000	22,000	20,000	(2,000)
	51,500				64,000	64,000	51,500	(12,500)
	14,000				14,000	14,000	14,000	0
	5,000				5,000	5,000	5,000	0
	8,000				13,000	16,000	8,000	(8,000)
	5,000				4,040	5,780	5,000	(780)
	8,600				13,060	10,610	8,600	(2,010)
62,217	257,100	73,392	392,709	13.1%	261,100	295,390	257,100	(38,290)
1,538,208	453,826	(0)	2,992,033	100.0%	1,413,215	1,673,041	1,457,826	(215,215)

Reference Committee on Constitution & Bylaws

Article V — House of Delegate; Section 1. Composition.

Voted to amend the Constitution to authorize inclusion in the House of Delegates of a Delegate and an Alternate Delegate from each specialty society represented on the Interspecialty Council as provided for in the Bylaws.

Chapter IV — House of Delegates; Section 2 (c).

Pursuant to authority granted by the above amendment to Article V, the House voted to limit specialty society delegates and alternates in the House to those societies who are members of the Interspecialty Council with at least 80 percent of their members being members in

good standing of the Medical Association of Georgia.

Chapter V, Section 4. Executive Committee.

Adopted an amendment to the Bylaws to add the Chairman of the Council on Legislation as a full, voting member of the Executive Committee.

Chapter XIV, Section 1. Rules and Ethics

Voted to amend the Bylaws concerning ethics so that the Board of Directors or House of Delegation could reject, modify or change prevailing ethics or standards governing the conduct of members. Such rejections, modification or changes

would then become the official position of the Association.

Chapter IV, Section 2 (a)

Voted to amend the Bylaws by eliminating the requirement that delegates and alternates must have been members in good standing of MAG for 3 years to be eligible to serve in the House of Delegates.

Article VII, Section 4. Term of Other Officers.

Voted to receive a Resolution that calls for a Constitutional amendment to limit Directors and Alternate Directors to two consecutive terms of 3 years each. This Resolution will be presented for a vote at the 1993 House of Delegates

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By the end of this decade, Georgians will lose more than 2 million acres of rich natural areas -- areas that offer a home to hundreds of species of animals and plants. Currently only 8 % of the state is protected and will never be developed.

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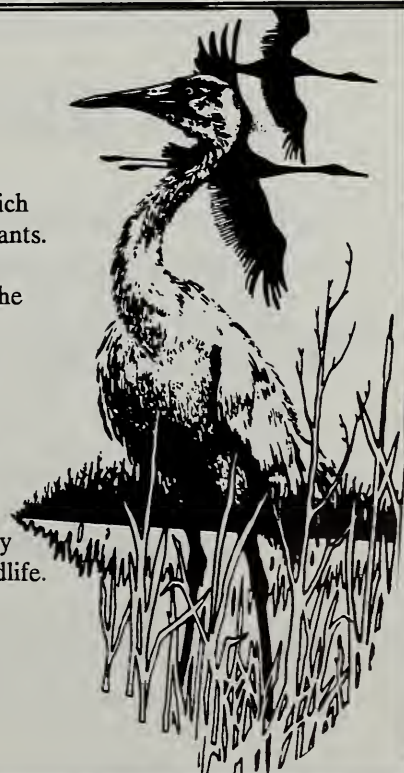
If you are concerned about our disappearing natural resources and vanishing wildlife *you can help too!*

Make a donation to the Nongame Wildlife Fund through the state income tax checkoff. Use line 26 (long form) or line 6 (short form) on the state tax form to contribute a portion of your refund.

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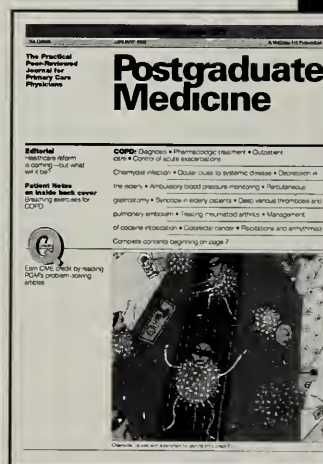
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The American Medical Association, CLIA and You

The federal government has released long-awaited rules to implement the Clinical Laboratory Improvement Act of 1988. The law expands the extent of federal laboratory regulation from the 13,000 labs now regulated to an estimated 200,000.

The bottom line, and the most encouraging news, is that physicians performing in-office tests will be able to continue with current personnel. But, standards will be most stringent for labs doing the most complicated tests.

In response to comments by the AMA and other physician groups, the test categories were changed to more accurately reflect how physicians use tests in caring for patients. Rules governing personnel were modified to allow doctors with one or two years of training or experience to head their own labs. Other personnel rules should be phased in over five years to provide help in rural areas.

The rules were published February 28 in the *Federal Register*. The AMA will work with specialty and state medical societies to modify parts of the rules that still need revision. Early analysis shows that problems remain. For example, it's not clear what kind of experience physicians are required to have to head an office lab. Regulations requiring routine unannounced inspections are apt to disrupt patient care. HCFA's estimate that additional costs will only add 25 cents per test is in question.

Regulations won't be effective until September and then will be phased in over several years to give physicians time to learn and comply. The AMA, working with other medical groups, has

already begun to put together educational programs and materials.

Here are the CLIA implementation timetables:

September 1, 1992: Quality standards go into effect. Labs will have to adhere to manufacturers' current instructions, and meet other specific interim quality control requirements. Also, a complete list of lab tests will be published. Enforcement regulations will go into effect.

January 1, 1994: Newly regulated labs, including most physician office labs, must be enrolled in a proficiency testing program.

In most office labs, the physician would serve as the clinical consultant—liaison between the lab and its clients for the purpose of interpreting and reporting test results. Physicians may also serve as technical consultants—the one responsible for technical and scientific oversight of the lab. Between September 1, 1992 and January 1, 1994, test manufacturers should be revising instructions to make them consistent with CLIA requirements and be approved by the FDA.

For now, wait. In the next few months, the government will begin to tell physicians what regulatory category they are going to fall into, how to register and how much to pay.

AMA executive Vice President, James S. Todd, MD said physicians should be "encouraged, but not complacent" about the regulations. "We are cautiously hopeful that these rules can be implemented with the minimal physician impact. But they will clearly have an impact on their offices," Dr Todd said.

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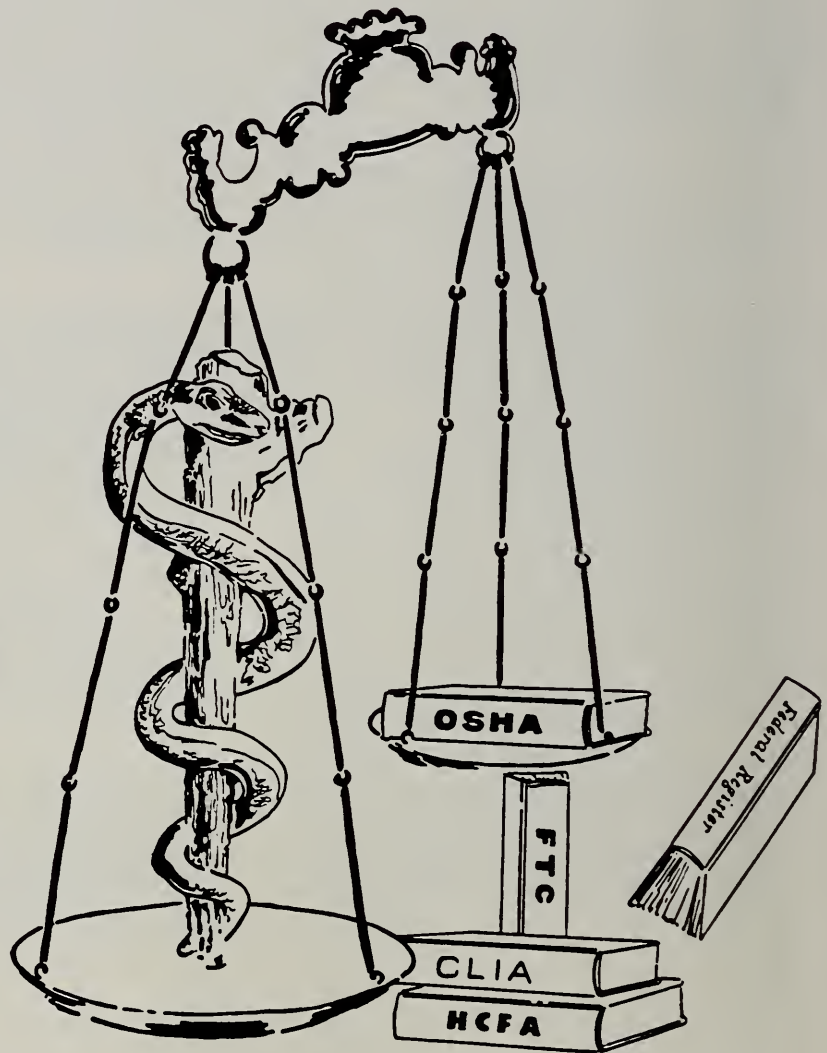
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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon[®] is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

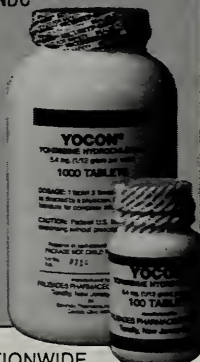
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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SUMMER — Mem. Day Wknd. through Labor Day Wknd.

Daily	140	155	170	280	290
Weekly	700	775	850	1550	1750
Monthly	2450	2715	2975	5425	6125

Shipwatch

SUMMER — Mem. Day Wknd. through Labor Day Wknd.

Daily	115	125	140
Weekly	575	625	700
Monthly	2015	2185	2450



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ADVERTISING INDEX

American Heart Association	397
American Medical Association	398
Classified Advertisements	399
G.D. Searle & Company	402
Georgia Hospital Association	396
Georgia Nongame Wildlife Program	395
Health Quip, Inc.	396
Knoll Pharmaceuticals	360A-B
Law and Medicine Seminar	400
Lilly, Eli & Company	401
MAG Mutual Insurance Company	344
Palisades Pharmaceuticals, Inc.	401
Postgraduate Medicine	396
Trupp-Hodnett Enterprises	401
U.S. Air Force	367
U.S. Army Active	343
U.S. Army Reserve	342
Walton Rehabilitation Hospital	343

MANUSCRIPT INFORMATION

MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely in this *Journal*. Manuscripts should be typewritten, double-spaced, and the original and one copy should be submitted. Receipt of manuscripts will be acknowledged.

STYLE — In general, articles can be 8-10 pages in length. For exceptional circumstances, contact the Managing Editor. Footnotes, bibliographies, and legends should be typed on separate sheets, double-spaced. Bibliographies should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages.

Sorter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

ILLUSTRATIONS — Illustrations must be submitted in duplicate. Illustrations, tables, etc., should bear the author's name and figure number. Used photographs, drawings and cuts will be returned after publication only if requested. The cost of reproduction of illustrated material for publication in excess of three average illustrations and/or tables will be borne by the author, and the *Journal* will bill the author for this expense.

GENERAL POLICY — Authors will be given as wide a latitude as the general policy of the *Journal* and the demands on its space permit. The right to reduce, revise, or reject any material submitted for publication is always reserved. The *Journal* is not responsible for statements made by any contributor. All communications regarding editorial, advertising, subscription, and miscellaneous matters should be sent to the Managing Editor, 938 Peachtree Street, N.E., Atlanta, GA 30309-3990.

ADVERTISING — All pharmaceutical advertising must be approved by the State Medical Journal Advertising Bureau, Inc., to be acceptable for publication. Other advertising copy may be accepted subject to the approval of the Editor. All copy or negatives must reach the *Journal* office by the 25th of the month 2 months prior to publication. General and classified advertising rates will be furnished on request.

MEDICAL EDITING SERVICES — If in the opinion of the *Journal* Editorial Board, material submitted for publication could be improved by a Medical Editing Service, the Editor will contact the author for his or her approval. Association members needing assistance in preparation of material for publications may also use this service. A reasonable charge is made for this service and the cost of this will be borne by the author.

**MEDICAL ASSOCIATION OF GEORGIA / COMPONENT
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_____ ECFMG#

EXPECTED RESIDENCY PROGRAM COMPLETION DATE: (if resident) _____

FELLOWSHIP: _____
Date

HOSPITAL AFFILIATIONS: _____
(1) (2) (3)

TEACHING APPOINTMENTS: _____
Date

MILITARY: _____
Branch Dates Rank

Branch Dates Rank

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ARE YOU A CURRENT AMA MEMBER? _____ YES _____ NO LAST YEAR PAID: _____

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Within the last 5 years, has your license to practice medicine in any jurisdiction been limited, suspended or revoked?
() Yes () No If yes, please explain.

Within the last 5 years, have you been the subject of any disciplinary action by any medical society or hospital staff?
() Yes () No If yes, please explain.

If elected to membership, I agree to conduct myself professionally and personally according to the principles of medical ethics and to be governed by the Constitution and Bylaws of the county society, the Medical Association of Georgia and the American Medical Association.

I hereby release, and hold harmless from any liability or loss, the _____
Medical Society, and the Medical Association of Georgia, their officers, agents, employees, and members, for acts performed in good faith and without malice in connection with evaluating my application and my credentials and qualifications, and hereby release from any liability any and all individuals and organizations, who, in good faith and without malice, provide information to the above named organizations, or to their authorized representatives, concerning my professional competence, ethical conduct, character and other qualifications for membership.

County Sponsor's Signature*

Applicant's Signature

County Sponsor's Signature*

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*If you have any questions regarding sponsors, please contact your county society.

Of Our Country

Charles R. Underwood, M.D.

AMERICA has a thousand lights and weathers and we walk the streets, we walk the streets forever, we walk the streets of life alone.

It is the place of the howling winds, the hurrying of the leaves in old October, the hard clean falling to the earth of acorns. The place of the storm-tossed moaning of the wintry mountainside, where the young men cry out in their throats and feel the savage vigor, the rude strong energies; the place also where the trains cross rivers.

It is a fabulous country, the only fabulous country; it is the one place where miracles not only happen, but where they happen all the time.

It is the place of exultancy and strong joy, the place of the darkened brooding air, the smell of snow; it is the place of all the fierce, the bitten colors in October, when all of the wild, sweet woods flame up; it is also the place of the cider press and the last brown oozings of the York Imperials. It is the place of the lovely girls with good jobs and the husky voices, who will buy a round of drinks; it is the place where the women with fine legs and silken underwear lie in the pullman berth below you, it is the place of the dark-green snore of the pullman cars, and the voices in the night-time in Virginia.

It is the place where great boats are baying at the harbor's mouth, where great ships are putting out to sea; it is the place where great boats are blowing in the gulf of night, and where the river, the dark and secret

river, full of strange time, is forever flowing by us to the sea.

* * * *

It is the place of violence and sudden death; of the fast shots in the night, the club of the Irish cop, and the smell of brains and blood upon the pavement; it is the place of the small-town killings, and the men who shoot the lovers of their wives; it is the place where the negroes slash with razors and the hillmen kill in the mountain meadows; it is the place of the ugly drunks and the snarling voices and of foul-mouthed men who want to fight; it is the place of the loud word and the foolish boast and the violent threat; it is also the place of the deadly little men with white faces and the eyes of reptiles, who kill quickly and casually in the dark; it is the lawless land that feeds on murder.

* * * *

It is the place of the fast approach, the hot blind smoky passage, the tragic lonely beauty of New England, and the web of Boston; the place of the mighty station there, and engines passive as great cats, the straight dense plumes of engine smoke, the acrid and exciting smell of trains and stations, and of the man-swarm passing ever in its million-footed weft, the smell of the sea in harbors and the thought of voyages — and the place of the goat-cry, the strong joy of our youth, the magic city, when we knew the most

fortunate life on earth would certainly be ours, that we were twenty and could never die.

And always America is the place of the deathless and enraptured moments, the eye that looked, the mouth that smiled and vanished, and the word; the stone, the leaf, the door we never found and never have forgotten. And these are the things that we remember of America, for we have known all her thousand lights and weathers, and we walk the streets, we walk the streets forever, we walk the streets of life alone.

Of Time and the River
THOMAS WOLFE

TO: MR. ROSS PEROT

Texas

Dear Ross,

I'm beginning to get the feeling that you're serious about this business of running for President of our country. For a long time, several months in fact, I heard rumors that you were thinking that way, "considering it," they said, but it sounded so unreasonable that I just thought you must be another crack pot in this land where freedom of speech, thought, and action are said to be guaranteed. After all, in 1969 you told a man from *Newsweek* magazine, "I'd be terrible in public office. I'm too action-oriented, which means if I had an idea on Friday and wanted it done by Monday it would be just too much to expect from the government." And then in 1987, you told a *New York*

Times reporter, "When people ask 'What are you going to run for?', you say 'the city limits.' Since 1968 there have been all these theories that I was running for this, that, or the other. This country has enough problems without inflicting me on it." That kind of talk made me wonder about you. But now I'm worried. You seem to be serious about it. I read the other day that you are a "Billionaire" and that you plan to spend "millions" or "whatever it takes" doing this. "Pretty soon," as Senator Dirksen used to say, "we are gonna be talking about real money."

Well, it is your money I guess, even if you did make it from government contracts, so I suppose I needn't worry about that. What does bother me is that you don't have a "Party." Down my way, South, you got to have a "Party." You just must be a Democrat or a Republican. A Donkey or an Elephant, you know. Where I grew up in the Tennessee River Valley, things were sort of poor and sorry even before the Depression hit us in 1929. Then Franklin Delano Roosevelt built those dams on the Tennessee River and started a bunch of "public works programs." We hung his picture in every filling station and road side cafe in Alabama for doing that. And we voted for him the next two elections. Planned to vote for him again until he up and had a stroke and died right here in Georgia. They said he had another woman, a "mistress" and that she "stressed him" too much, but I never believed that. He built those dams and he had a "Party" and that was enough for me. But anyway, somehow you got to get yourself identified. We are used to Parties down here.

That is just "politics," though and from what I read you are not a "politician." They say you are an "outsider." Clean and free and unencumbered. Don't believe I've ever known anybody like that. Every-

body seems to have some kind of string attached to them except George Schultz. He was Secretary of State with Reagan, you remember. He resigned that post three times, and when they asked him why he did that he told them that he thought, "if you want a job so bad you will do anything to get it or keep it, then you shouldn't have it." He wasn't willing to say or do just anything to keep that job. But about "politics," I noticed where you made a speech to the National Press Club back in March this year, and you told those people, "The Chief Financial Officer of a publicly owned corporation would be sent to prison if he kept books like our government. We cannot continue to tolerate this. The average citizen works five months a year just to pay his taxes. Forty two per cent of his income goes to taxes. All the personal income taxes collected west of the Mississippi are needed just to pay the interest on the national debt. That is kind of depressing, isn't it? The total national debt was only \$1 trillion in 1980 when President Reagan took office. It is now \$4 trillion. Maybe it was voodoo economics. Whatever it was, we are now in deep voodoo, I'll tell you that!" You know, Ross, Washington, D.C., is a city full of "politicians," and I just got to wonder if you go around talking about one of our most popular Presidents and our politicians that way if you have much of a chance to get elected.

Now Ross, we've got some real problems in this country and I just can't get rid of this nagging worry about how you might handle them. Having a clean slate in politics, "no baggage," they say, is an asset, I guess, but on the other hand when I look for your "positions" on the "issues" I sort of feel like I am grasping at a butterfly that floats away about the time I'm about to put the net on him.

Take education for example. Mr. Bush wants to subsidize private

schools. Use "vouchers." The President of Yale University is helping start a for-profit private school system that he says will correct the flaws in our public school system while others say his plan will destroy public schools. I have read where there was a hearing on Texas educational reform back in 1983, and you told those people, "I've found little schools that have sixty teachers and twelve coaches." When they told you that was "rare" in Texas, you told them, "So is a one-legged tap-dancer, but it happens."

Then again, in 1984, you told a bunch of Texas School Board members and administrators, "This is the group that let cost go through the roof while academic achievement went through the floor. It starts to seem ludicrous that you want to keep the captain of a ship that ran aground every time you gave him the helm. If we are going to look after the children, we have got to put in a team that can manage this system. Sooner or later, the old-boy network has got to break down. You can't throw enough money at this system and make it work. It is a bad system."

Now that is what I call taking a "position on the issue." The trouble though, Ross, is that it sounds good, but down here in the South if you fire our football coaches, you're not going to get many votes. On the other hand, there is something about those remarks that has a good academic ring to it.

And then about the fiscal position of our country, I hear we are in a real mess, what with the Federal deficit of \$4 trillion and that climbing. We are spending more than we take in and even a surgeon can understand that won't work for too long. In my business they call that a "negative nitrogen balance" which makes me think we need more nitrogen in the system. They say you are a "businessman" and that you can understand and

straighten this out. The thing that troubles me, though, is that you've always been in a position of having a lot of money to work with and you are talking about taking over a company, our country, that is down in a great big black hole called "the deficit." We got a lot of things they call "entitlement programs" in this country, and I just wonder how you are going to handle them and still get rid of that deficit.

There are lots of other things I'd like to know your opinion of — your position on — but being what we call a "private practitioner of medicine," it would help me a lot in deciding whether or not to vote for you if I knew what you might do to "restructure" the health care system in this country. You see, we've got what some folks think is the best medical care in the world and yet everybody says it costs too much. And then if you get over what it costs, they talk about thirty nine million folks without health insurance. Some of our politicians in Washington say they know how to fix that. Just make health care a "right," give everybody rich and poor a health insurance policy and let the government pay for it. Sounds simple to me. The problem I've got with it though, Ross, is I just can't see how we are going to get us doctors to work as hard and long and be as interested in how sick folks do if you pay them half of what their work is worth. You see, we are just ordinary human beings who happen to have this interest in sick people and a desire to help them get well. But, we are also like you and other folks who like to be appreciated and get paid fairly for what we do. And then you've got to deal with those hospital bills. That's 47% of what it costs to get a sick person well. It's a tough problem, Ross, but you are a businessman, and I bet you can figure it out.

In a recent appearance on the "Today Show," you made some remarks about how you would do this restructuring. You said, "*Step One,*

you've got to go through a logical process to put together a new plan, bring it to the people, get a consensus, do pilot programs, optimize those pilot programs, know your cost, know your benefits, build a consensus that this is the answer and then do it. Then you mass produce it, leave tremendous freedom to optimize, optimize, optimize. We freeze everything in law, and that is an absolute way to make sure you don't get your maximum bang for your buck. And that is what the American people deserve."

Then on the "Donahue Show" in March of this year, you said, "*We have the most expensive health care system in the world, and yet we are behind 15 other nations in life expectancy and behind 22 other nations in infant mortality. So we don't have the finest health care system in the world for our money. Study the nations that have more cost effective systems. Build pilot projects. Keep the people informed about what the benefits and what the costs are and go to a health care system that does a better job and costs less money.*" Now that sounds good to me. Sort of anyway. "Freezing everything in law" is what we have been doing the past few years. That's what the Medicare and Medicaid and PPO and HMO programs did. They froze everything in "rules and regulations." God Almighty, Ross, they have about froze our creativity and our compassion and that is what made our health care system so good.

Well, Ross, that's enough from me. This is about to sound like a paragraph from the Federal Register telling us how to start a bottle of IV fluids. I think I am going to vote for you. Not sure why. Maybe because the others look too dangerous — or too tired — or just don't seem to have enough fire in their belly. But Lord help me if I wouldn't give anything to sit down in a Texas barroom with you, look you straight in the eye, and make up my mind if you are for real. You see, that is what worries me.

Yours for the pursuit of life, liberty, and happiness,
Charles R. Underwood, M.D.
Editor, *J.M.A.G.*

PS: (July 16, 1992)
Ross — You SUNUFABITCH. Here I go writing this ungodly "Corner" — laying my whole heart out and telling my friends what I think — sort of suggesting that I like what you say, and what do you do but up and quit. It's too late now to write the damn thing again. And on top of that, you do it the day after my forty second wedding anniversary and me hung-over. What kind of friend are you anyway?

Now I'm left with Clinton who says flat out he is going to have a National Health Plan — put all of us doctors on a salary — probably pass the money through the hospitals — and George Bush who, lord knows, is a good man but as far as I can tell doesn't know a belly ache from a sore throat and is more interested in the Emir of Kuwait than how they figure the "weight" of a DRG.

Not too surprised though. After all, you told the *Los Angeles Times* in August, 1980, "*This country has enough trouble without having me in office. Seriously, I am not qualified for the job by background, experience, or temperament.*" And then in 1985, you remarked to a *United Press* reporter, "*I'd make a terrible politician. My orientation toward results would get me in deep, deep trouble. I have no patience.*"

Lookin' back, Ross I guess it is best. You kinda' floorboarded our adrenalin with all that rhetoric of yours. Sorta like a girl I knew back in high school did to all us boys. God, what a woman that one was! And what a let down when the dance was over. Thanks, Ross, for the roller coaster ride. And then too, thanks for shaking up the system. You made a few "politicians" break a sweat and Lord knows we needed that.

CLINICAL LABORATORY IMPROVEMENT ACT: A REMINDER

Federal regulations implementing the Clinical Laboratory Improvement Amendments of 1988 become effective on September 1. The statute extends federal regulatory authority to all facilities of any size which test humans specimens, including physicians' offices.

While providers performing only simple tests, such as dipstick/tablet urinalysis and urine pregnancy tests, will be eligible for a waiver, every facility performing any testing on human specimens is required to complete the HCFA-109 form, "Information to Implement the Clinical Laboratory Improvement Amendments of 1988." While more than 640,000 forms were distributed nationally in November of 1991, some physicians may not have re-

ceived the form. All laboratories, regardless of the level of the tests they perform, must register with HCFA and demonstrate good laboratory practice.

If you have received the HCFA-109 form and you conduct laboratory tests in your office, complete and submit the form immediately. If you need a form or have any questions about the information requested, call HCFA's CLIA Hotline at 410-290-5850. **Note: Failure to be certified and meet the CLIA Regulations may result in fines up to \$10,000 per day or per incident.**

CLIA RAISES TESTING COSTS

Federal regulations for implementing the Clinical Laboratory Improvement Amendments of 1988, or CLIA, are likely to increase the cost of medical testing both for physicians and patients, according to

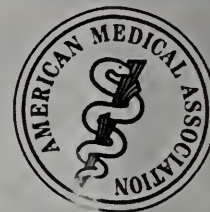
CLIA Study Coalition. The coalition — consisting of the AMA, American Hospital Assn., Health Industry Distributors Assn.—sponsored a study that found the regulations will increase the costs for physician office laboratories and hospitals by \$409 million to \$728 million during the first year, depending on the final form that the regulations take. After the third year, the average cost of performing a single test will be 62 cents to \$1.16 higher than it would have been without the regulations. The coalition study estimates that about 4,000 of the nation's 88,400 physician office and clinic laboratories will be forced to close or confine their testing to a very few waived tests.

MAG's YPS and MSS Reps Excell at AMA

Georgia's young physicians were well represented at the AMA meet-

American Medical Association

Physicians dedicated to the health of America



1992-1993 AMA-MSS Governing Council, Speaker and Vice Speaker (L-R): John Coleman, Jr., Speaker, Emory University School of Medicine; Elaine Holstine, Vice Speaker, Wright State University School of Medicine; Glenn Crater, Delegate, University of Tennessee School of Medicine — Memphis; Barbara Dudley, Vice Chairperson, East Carolina University School of Medicine; Jane Uva, Chairperson, Wright State University School of Medicine; Jennifer York, Alternate Delegate, Baylor College of Medicine; Maria Simbra, At-Large Officer, University of Pittsburgh School of Medicine; Michael D. Cantor, MD, JD, Immediate Past Chairperson, Beth Israel Hospital.



Dr. John Coleman, Speaker, AMA-MSS Governing Council.

ing in Chicago in June. Delegates Glenn Carter and Robert Tucker, and alternate delegate Ben Cheek, participated in the annual meeting of the Young Physicians Section.

The YPS continues to work on membership recruitment. Both Dr. Carter and Dr. Joy Maxey received awards in Chicago for efforts in recruitment. Also, Georgia was one of only a few states receiving special recognition because of gain in membership, due to recruitment by YPS.

Dr. Spurgeon William Clark, III, completed his term as delegate from YPS to the AMA. Dr. Clark has received invaluable experience and has been an excellent representative of the views of young physicians.

Dr. Joy Maxey began her year as Chair of the AMA Young Physicians Section, and as 2nd Vice-President of MAG.

We continue to try to find young physicians who are interested in organized medicine. If you know of interested physicians, please encourage them to attend our next

meetings; in Atlanta at MAG's Scientific Assembly (November 20-22, 1992).

TIDE IS TURNING AGAINST PHYSICIAN SELF-REFERRAL

A consensus is forming that self-referral has given medicine a black eye and has provided few benefits to patients, according to a study published in this week's *Journal of the American Medical Association*.

Thomas Crane, JD, MHSA, from the Office of General Counsel, Inspector General Division, U.S. Department of Health and Human Services (HHS), outlines recent changes that have taken place in the legal and ethical status of physician self-referral.

In July, 1991, HHS issued the "safe harbor" regulation, which permits self-referral only under very narrow constraints. In September, 1991, the HHS Departmental Appeals Board ruled in the landmark Hanslester Network case that joint venture profit distributions are illegal under the anti-kickback statute when the intent is to influence investors' reason or judgment in referring Medicare or Medicaid patients. In March, 1992, an administrative law judge also ruled that profit distributions violated the statute.

HHS UPDATES CONVERSION FACTOR

The AMA has objected to the U.S. Dept. of Health and Human Services' recommendation for updating the 1993 Medicare conversion factor. HHS Secretary Louis W. Sullivan, MD, had called for a 2.6% update for surgical services and 0.3% for non-surgical services. The influential Physician Payment Review Commission, or PPRC, also advised Congress that surgery should get a bigger increase in Medicare payments next year than other services. In discussions with the department, the AMA has argued the multiple conversion factor updates

undermine the resource-based relative value scale. The PPRC has recommended a single increase for 1994.

STARK: GLOBAL BUDGETS MEDICARE RATES FOR ALL

A health care reform package that features strong cost controls on providers including global health budgets and extension of Medicare's payment system to all payers has been assembled by House Ways and Means Health Subcommittee Chairman Pete Stark (D-CA). The effort appears to have the backing of House Majority Leader Richard Gephardt (D-MO), a strong proponent of global budgeting and all-payer rates.

National expenditure limits would be set by statute for total public and private spending for health services beginning in 1994. The plan aims to hold health spending at about 15% of the gross domestic product by 1998. The Prospective Payment Assessment Commission (ProPAC) and the Physician Payment Review Commission (PPRC) would recommend provider payment policies to Congress. Recommendations would include the allocation of national expenditures among hospitals, physicians, and other sectors of the health care system would be set by statute consistent with the national global budget.

Among other things, the package calls for following:

- new DRGs for the under-65 population would be developed; rates would be set initially at 100% of costs for services to the under-65 population adjusted of uncompensated care and Medicaid payment levels; rates would be adjusted by area for wages and for non-labor input prices; rates for large urban hospitals would be higher;

- outpatient hospital fees would be set by limits on a year-to-year rate of increase, pending develop-

ment of a prospective payment system;

- a federal formulary would be established for prescription drugs; the Department of Health and Human Services (HHS) Secretary would establish maximum rates of payment for each drug in the formulary;

- states could opt out of the Medicare model if they can come up with comparable plans; currently qualified HMOs would not be required to pay at the Medicare-type rates;

- health insurance reforms, including health insurance coverage, could not discriminate on basis of health status; preexisting conditions would be limited to 6 months; requirements that health insurers accept all groups and individuals in an area who apply;

- administrative simplification measures including uniform electronic billing for all providers and all payers and the creation of a national electronic health claims network;

- an extension to all payers of the ban on physicians referring patients to entities in which the physician has a financial interest.

Stark's plan calls for the federalization of Medicaid for low-income pregnant women and children. Benefits are comprehensive, including prescription drugs, dental, eyeglasses and hearing aids. The initiative would be phased-in over 5 years beginning in 1996 and continue through the year 2000. By the year 2000, all pregnant women and children up to age 19 and up to 200% of poverty would be covered.

Eligibility would be determined by the states using uniform national criteria. States would contribute each year and an amount equal to acute care expenditures for low-income pregnant women and children who were covered under Medicaid in the year preceding implementation of the new low-in-

come federal benefits plan. Medicaid would continue as a federal/state program for nursing home and other long-term care services.

If the Democrats on the Ways and Means Committee approve the plan, it will then go before the House Democratic Caucus, where the leadership hopes to learn if it has a basis for a passable bill. Strong opposition is expected from conservative Democrats who abhor global budgets and price controls as much as President Bush does.

HCFA RESPONDS TO RECOMMENDATIONS

The Health Care Financing Administration responded to AMA recommendations for changes in Medicare's postpayment review of physicians. Acting Administrator William Toby, Jr., told the Association that the agency will take action to make sure that carriers provide due process. Among other things, HCFA will instruct carriers to communicate their postpayment procedures annually through newsletters or bulletins. The AMA has also indicated concern with the federal agency's requirements governing how physicians repay any overpayment they receive from Medicare. The AMA recommended that HCFA amend its procedures so that:

- physicians would not be required to begin repayments until after completing the appeals process.

- the agency would reduce the interest rate charged to physicians.

- the interest rate would be no higher than the rate Medicare pays when physician claims are delayed.

HCFA TIGHTENS NURSING HOME SURVEY RULES

Bowing to consumer pressure, HCFA has issued tougher guidelines for state surveyors of nursing homes. The 300-page rulebook, sent to states in May, includes pre-

cise questions designed to determine whether homes are overusing physical or chemical restraints.

The new rules give state-hired inspectors help in protecting residents against abuse when drugs are prescribed on an "as needed" basis. The tough new rules represent a reversal of HCFA's earlier position, which gave states guidance but allowed them to use broad judgment.

MEDICARE PLAN WOULD TIGHTEN RECLASSIFICATION

A proposed HCFA policy would block the ability of hundreds of mostly rural hospitals from getting reclassified to reap higher Medicare payments. The proposal, published in the June 4 *Federal Register*, responds to complaints from urban facilities that the current reclassification system has gotten out of hand and is costing them millions of dollars a year. Since 1990, hospitals have been able to apply for reclassification to get more favorable payments.

In fiscal 1992, more than 1,000 facilities changed categories. That forced HCFA to halve the annual increase in urban hospital payments. A similar occurrence is looming for FY93.

Beginning in FY94, however, HCFA wants to limit reclassification to hospitals with average hourly wages that are at least 108% of the average wages of their current grouping and at least 84 percent of what is paid by hospitals in the new category. In FY94, HCFA officials say the new policy could block 71% of the estimated 1,150 facilities that have qualified for a payment switch in FY93.

ACCESS TO AUTOMATED, AREA-SPECIFIC FEE VERIFICATION SYSTEM

Recent advances in telecommunications and database technology have made possible a zip code

based, automated fee verification system accessible by most touch tone phones. Users are prompted for the zip code on which verification is to be based, and the CPT-4 code(s) desired. The system then verbally provides both "average" and "reasonable and customary" fees for that area.

Information in the database has been compiled by surveys of more than 100,000 physicians across the United States, and is shared with several hundred HMOs, PPOs, BCBS plans and other health insurers.

The satisfaction with the FeeChek service is guaranteed, and the legality of its dissemination strictly in compliance with all federal and state anti-trust regulations. You can gain access to FeeChek by calling 900-370-6070. It costs \$4.95 per minute to use, and it takes less than a minute to review each CPT-4 code.

COMPLYING WITH NEW FEDERAL LAW ON VACCINATIONS

Effective April 15, 1992, all health care providers who administer DTP, MMR, and polio vaccinations are required by Federal law to provide patients, parents or guardians with specific information on the potential side effects and benefits of these three immunizations...before they are administered. This information is contained in three pamphlets developed by the CDC.

HCFA EXTENDS GRACE PERIOD FOR HCFA 1500 MEDICARE FORM

Responding to pressure from the AMA and state medical societies, HHS Secretary Louis Sullivan, MD, has extended until July 1 the grace period for using the current HCFA 1500 claim form. HCFA is now accepting both the old and the new form and encourages physicians to begin using the new form. As of July

1, claims received on the old form will be returned.

SULLIVAN ISSUES HHS PHYSICIAN PAYMENT RECOMMENDATIONS

On May 25, HHS Secretary Sullivan issued the HHS-recommended Medicare physician payment schedule conversion factor updates for 1993. The announcement also presents the Medicare Volume Performance Standard (MVPS) for fiscal year 1993, and potential program directions for congressional and public consideration.

Sullivan issued HCFA's recommended Medicare physician payment schedule conversion factor updates for 1993. HCFA is recommending the conversion factor for surgical services and non-surgical services receive separate updates. HCFA suggests that the conversion factor for surgical services be increased by 2.6 percent, while the conversion factor for other services be increased by 0.3 percent.

Sullivan said HCFA is recommending larger updates for surgical service because physicians provided fewer surgical services in 1991 than HCFA projected by its Medicare Volume Performance Standard (MVPS) while non-surgical services exceeded its MVPS. Based on these updates, the conversion factor for 1993 would be \$31.807 and \$31.094. Congress ultimately decides how the conversion factor will be updated. If Congress does not act, HCFA's recommendation could become effective Jan. 1, 1993.

HCFA REDIRECTS PEER REVIEW EFFORT

The Health Care Financing Administration is drafting a proposal to reform the Medicare Peer Review Organization program in ways that the AMA has long advocated. HCFA expects to complete the proposal, called the Fourth Scope of

Work, later this summer. The document outlines requirements that the nation's 53 PROs must undertake beginning April 1, 1993. The current draft would redirect peer review efforts away from detecting individual clinical errors. Instead, PROs would be required to analyze patterns of care. They would share their analyses with physicians, hospitals, medical staffs and state medical associations.

PHYSICIANS COULD APPEAL QIP DECISIONS

Resulting in part from the AMA's repeated requests, the Fourth Scope of Work will for the first time allow physicians to appeal "confirmed quality problems" under the Quality Intervention Plan. HCFA's draft of the requirements specifies that PROs must provide for a second-level physician review. In most cases, the second-level reviewer must be a specialist in the type of service being considered.

OSHA REQUIRES HEPATITIS IMMUNIZATION

Effective July 6, the Occupational Safety and Health Administration requires employers, including physicians, to offer a hepatitis B immunization series to employees who may come in contact with blood and other infectious materials through their job. Employers also are required to provide gloves, gowns or face shields for employees to wear when they are at risk for exposure. Inspectors are authorized to visit a work place without advance notice. OSHA has indicated to the AMA, however, that it will investigate violations only in response to employee complaints.

ASIM URGES PROMPT ACTION ON SENATE BILL TO RESTORE PAYMENT FOR EKG INTERPRETATION

The American Society of Internal Medicine (ASIM) recently an-

nounced its "strong support" for newly introduced Senate legislation that would restore Medicare payments for the interpretation of electrocardiograms (EKGs). The bill, introduced by Senators Dave Durenberger (R-Minn.), Jay Rockefeller (D-W. Va.) and Bob Packwood (R-Ore.), would reverse a hastily passed provision of the Omnibus Budget Reconciliation Act of 1990 prohibiting Medicare reimbursement for the interpretation of virtually all EKGs performed in the hospital and office setting.

ASIM Executive Vice President Alan R. Nelson, MD, said the prohibition on Medicare payments for the reading of EKGs has seriously disrupted patient care. As a result of the prohibition, Dr. Nelson said, "many physicians and health care facilities have been forced to make other arrangements for EKGs to be interpreted, such as referring patients for a complete medical consultation" at greater patient cost and inconvenience. Some health care facilities have been forced to rely solely on computer interpretations of EKGs, a situation Dr. Nelson called potentially dangerous.

The Senate bill is budget neutral, meaning that Medicare spending would not have to be raised to restore EKG payments. Dr. Nelson said the bill is fiscally responsible and should be acted on as soon as possible to restore "a vital component of the care of Medicare beneficiaries."

REPUBLICANS INTRODUCE REFORM MEASURE

House Minority Leader Bob Michel (R, Ill.) has introduced a health care reform bill containing a number of provisions that are consistent with AMA policy. "Action Now Health Care Reform Act of 1992," or HR 5325, would reform the professional liability system as well as strengthen the medical profession's ability to regulate itself. Republican

representatives developed the bill in consultation with the AMA, which had extensive input. At a press conference, Health and Human Services Secretary Louis W. Sullivan, MD, noted that President Bush strongly supports the proposal. Gail Wilensky, White House deputy assistant for domestic policy, added that bill is similar to the president's own reform plan.

AMA STOPS OSHA VIOLATION CITATIONS

As a result of meeting between the AMA representatives and the Occupational Safety and Health Administration (OSHA), OSHA indicated that physicians would not be cited for violations of the new blood-borne pathogens standards until they are finalized. OSHA will continue to respond to and follow up on complaints if they have legal grounds based on previous OSHA regulations.

OSHA also indicated that it would not be targeting physician offices for inspections. Investigations into compliance with OSHA regulations and the new blood-borne standards would occur only upon receipt of a complaint from an employee.

The AMA voiced additional concerns that if citations are issued, physicians should be given the opportunity to pursue administrative appeals prior to OSHA issuing a news release about the citation; and that, absent an actual exposure incident, OSHA news releases should not describe violations as having exposed workers to HIV.

The AMA has received complaints from physicians that OSHA began enforcement of the new standards for preventing work place exposure to infectious diseases although the regulations were not finalized.

NIAAA'S ALCOHOL AND ALCOHOL PROBLEMS SCIENCE DATABASE

Which alcoholism-screening in-

struments are appropriate for which patient populations? How is alcohol linked to various medical disorders? What are the effects of prenatal alcohol exposure? The Alcohol and Alcohol Problems Science Database, commonly known as ETOH, quickly provides useful information on these and many other alcohol-related questions.

Produced by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), ETOH is the largest and most comprehensive on line source of alcohol research available in the world today. Users can search ETOH by subject, author, title, source, or year.

ETOH is available through BRS Information Technologies. Individuals with a computer, a telephone, and a modem can access ETOH directly by calling BRS at 800-995-0906 for a subscription and, once connected, can complete a search in minutes. For more information about ETOH, contact the Office of Scientific Affairs, National Institute on Alcohol Abuse and Alcoholism, 5600 Fishers Lane, Room 16C-14, Rockville, MD 20857.

MEDICAL WASTE LEGISLATION CLEARS SENATE COMMITTEE

The US Senate Environment and Public Works Committee has been working on legislation to impose new requirements on the handling, disposal, and tracking of medical waste. The committee recently approved legislation which would establish minimum guidelines to which all states would have to adhere. Although the legislation contains a small generator exemption for those who produce less than 50 pounds of medical waste per month, all sharps would have to be packaged, handled and disposed of in strict compliance with the new requirements. The legislation now goes to the Senate floor for further discussion and debate.

CALENDAR

August 1992

9-14 — *Kiawah Island, SC: Sleep Disorders.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

26 — *San Jose, CA: Alcohol and Other Drugs Certificate Program.* San Jose State University and State College of Social Work. Contact Alcohol and Other Drugs Certificate Program, CME, San Jose State University, San Jose, CA 95192-0135. PH: 408-924-2623 or 924-2601.

September 1992

2-5 — *Atlanta: North American Association For the Study of Obesity.* Category 1 credit 18 hours. Ritz-Carlton, Buckhead, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

5 & 12 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, School of Medicine, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

16-18 — *Atlanta: Radiology Symposium.* Category TBD. Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

23-25 — *Augusta: 16th Annual Neonatology — The Sick Newborn.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

October 1992

1-2 — *Atlanta: Contraception in the Nineties: Norplant, New Progestins, New Condoms and More.* Category TBD, The Ravinia Crowne Plaza, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

1-2 — *Augusta: Advanced Trauma Life Support:* Medical College of Georgia Campus. Category 1. Contact CME, Medical College of Georgia,

Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

1-3 — *Atlanta: Georgia Chapter of the AAP Fall Meeting.* Category 1 credit 9. Swiss Hotel, Contact William C. Mankin, 4059 Land O'Lakes Drive, 30326. PH: 404-237-3922.

2-3 — *Hilton Head Island, South Carolina: 8th Annual Cardiology for the Practicing Physician — 92.* Category 1 credit 6. Contact Georgia Heart Institute at University Hospital, Augusta, Mary Anne Cousins. PH: 800-344-8545.

2-4 — *Atlanta: Anesthesiology.* Hotel Nikko, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

3 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

8-10 — *Augusta: Panic and Anxiety.* School of Medicine, Medical College of Georgia. Category 1 credit. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

9-11 — *Hilton Head, SC: Frontiers in Nutrition.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

10 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

11-15 — *Atlanta: Interventional Radiology for Technologies & Nurses.* Category TBD. Hotel Nikko, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

17 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Au-

gusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

21-23 — *Augusta: Functional Endoscopic Sinus Surgery.* Medical College of Georgia Campus. Category 1 credit. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

29-31 — *Hiawassee: Autumn Primary Care Seminar.* School of Medicine, Medical College of Georgia. Category 1 credit. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

November 1992

8-12 — *Dallas, TX: Ninety-Sixth Annual Meeting of The American Academy of Ophthalmology.* Category 1 credit. Contact The American Academy of Ophthalmology Meetings Department, P.O. Box 7424, San Francisco, CA 94120-7424. PH: 415-561-8500.

12-14 — *Augusta: Pediatric Advanced Life Support* (Instructor and Provider). Category 1 credit. Medical College of Georgia Campus. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

20-22 — *Atlanta: Scientific Assembly.* Ritz-Carlton Buckhead. Category 1 credit. Contact Medical Association of Georgia. PH: 800-282-0224 or 404-876-7535.

28 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

December 1992

7-9 — *Atlanta: Nuclear Medicine Update.* Ritz-Carlton, Buckhead, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., N.E., 30322. PH: 404-727-5695.

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Juggling Fiduciary Responsibility — How to Avoid Dropping the Ball

Stephan C. Barton

RETIREMENT PLANNING is more difficult and perilous today than ever before. Tax law changes seem to occur almost every year; sound investment strategies are hard to formulate in our combustible and manipulated economy; administrative and investment costs are soaring; and worst of all, the federal government has become aggressively involved in retirement plan scrutiny in its effort to affect the federal deficit via fines and penalties. Two of the focal points of the federal government's escalated scrutiny of retirement plans are fiduciary responsibility and pension overfunding, two areas which are especially problematic within physician generated retirement plans.

The Legal Climate

Fiduciary responsibilities are serious and can involve unsuspecting physicians, their personnel or office managers, investment advisors, even administrative staff. The Department of Labor reports fiduciary violations in 25% of the plans it reviews. Congress perceived fiduciary misconduct to be significant enough to enact a new law in 1989 requiring the Department of Labor to impose a 20% fine on fiduciaries who permitted or caused violations to occur. In addition, the fiduciary is now required to oversee a plan's recovery of losses due to misconduct and any resulting penalties. Predictably, the Department of Labor has increased its schedule of retirement plan audits.

‘The federal government has become aggressively involved in retirement plan scrutiny in its effort to affect the federal deficit via fines and penalties. Two focal points of this escalated scrutiny are fiduciary responsibility and pension overfunding.’

The ERISA Trap

Obviously, some fiduciary violations occur when “crooks” go after plan assets and plan investors “bite the bait.” However, most problems occur when well-meaning business people unknowingly violate the Employee Retirement Income Security Act, (ERISA).

Most people recognize that plan trustees and administrators are fiduciaries, but ERISA's definition of fi-

duciary is much broader. Employees can become fiduciaries by performing regular job duties if their employer has taken a fiduciary position. For example, a P.C. usually designates the physicians as administrators or trustees of their retirement plan. However, the employees who perform the pension-related work become legal fiduciaries with personal liability risk.

Who Is a Fiduciary?

Under ERISA, a person is a fiduciary if he or she “exercises any discretionary authority or discretionary control respecting management of such plan or exercises any authority or control respecting management or disposition of its assets (or) he or she renders investment advice for a fee or other compensation... or has any discretionary authority or discretionary responsibility in the administration of such plan.”

This description of fiduciary status has produced surprising results as courts have applied it to individual cases. In one case, a bookkeeper was found to be a fiduciary because he followed the instructions of the company's principals to loan plan assets for operating capital during difficult economic times. These loans seriously depleted the plan's assets. When the bookkeeper left the company, there was not enough money available to pay his plan benefit, so he sued. He lost the case because the prohibited

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loans exceeded the value of his own plan assets. Worse yet, the court required him to make up the difference.

Others found to be fiduciaries have been company officers, directors and controlling shareholders, members of investment or administrative committees, stockbrokers, accountants, and insurance agents.

Fiduciary Liability

Fiduciary liabilities can be very extreme. Even though an indemnification agreement may exist, EACH fiduciary is personally responsible to the retirement plan for any loss caused by any impropriety. If more than one fiduciary is a factor in a loss, EACH is liable for the FULL amount of the loss, and one cannot require the other to share in the repayment. Escape from this dilemma is not easy either, as fiduciary liability is not *dischargeable even in bankruptcy*.

Obviously, anyone with any responsibility relating to a qualified retirement plan must be very careful. Of the many rules governing fiduciary conduct, ERISA's PRUDENT EXPERT RULE is perhaps most dangerous, as the fiduciary is held to the same standards as an investment EXPERT.

Few physicians have the time to develop enough expertise in plan management to comply with the prudent expert rule. Since most physicians realize this fact, they typically delegate fiduciary duties to outside experts, feeling that in doing so, they have complied with the prudent expert rule. However, much danger remains in this scenario.

Many benefit plan consultants advertise their ability to do everything — plan design, IRS filings, document preparation, and money management. Few individuals or companies are proficient in all of these areas. Most consultants know either the legal compliance section

of the industry or the investment portion, but few are proficient at both. Attorneys, CPAs, stockbrokers, and bankers often advertise their ability to perform all of the plan's required duties, but few have kept current with the complex rules which apply today to employee benefit plans. Even though a consultant gives oral assurances of his ability to perform all of the tasks in the plan, be wary if his literature claims it does not intend to furnish investment, tax, or legal advice.

Take Charge of the Risk

Plan asset management is the area of greatest risk for a fiduciary. Clearly, most physicians today are responsible for the investment results in their benefit plans. However, ERISA permits plan fiduciaries to avoid personal responsibility and liability in two ways: first, by passing responsibility for investment decisions to individual plan participants, and second, by appointing one or more official investment managers for the plan.

The Department of Labor has proposed several regulations governing the pass-through responsibility for investment decisions to the plan participants. First, individual accounts must be maintained for all participants, and each participant must be given an adequate variety of investment options. These options must include government-guaranteed safe investments (e.g., bank CDs), an option for capital appreciation and preservation (e.g., stock fund), and an option designed for liquidity with high repayment assurance (e.g., money market account). The Department of Labor also requires diversity within these categories.

If the benefit plan limits participants to pooled investments instead of separate accounts, the fiduciary must offer a safe fund, a capital preservation fund, a capital appreciation fund, a liquid fund,

and a balanced fund.

When plan investment responsibility is passed through to one or more qualified investment managers, four detailed legal rules must be followed stringently for the transfer of risk to take place.

- The plan document must expressly authorize the shifting of investment responsibility to an outside manager. (Most documents do not comply, as words such as "hold" and "disburse" are used in place of invest.)
- Under ERISA guidelines, the investment manager must be a bank, a Registered Investment Advisor, or an insurance company qualified via state law to manage plan assets.
- Only the named fiduciary (with respect to control or management of plan assets) can appoint an investment manager.
- The appointed investment manager must acknowledge in writing that he/she is a fiduciary with respect to the named plan.
- The named fiduciary must continue to monitor the investment manager's performance with prudence and expertise. The manager's performance involves his or her educational and work credentials, the client reference base, the past investment performance, the reasonableness of fees, and periodic accounting of assets.

With such a variety of ways for a benefit plan to fall out of compliance or to experience poor investment results, and with such severe penalties for which fiduciaries are held personally accountable, NOW is the time to seek qualified, professional help to make sure your benefit plan meets your objectives.

(The second part of this series, "Saving Too Much For Retirement," will appear in next month's issue of the Journal.)

Managing Your Office Manager

Gary Matthews

JUST A DECADE or so ago, medical practices were a cottage industry typically consisting of single practitioners, a couple of employees, and limited technology. Today, however, that scenario has changed significantly. Medical practices of the 90s have become full-fledged businesses comprised of several physicians, dozens of employees, sophisticated diagnostic and surgical equipment, and revenues in the hundreds of thousands — and in some cases, even millions — of dollars.

As a result of this practice evolution, the role of physician practice managers has changed dramatically. In the past, office managers were dutiful, loyal employees who were promoted to their positions through seniority or default. Managerial skills and experience were not a requirement.

Today, however, we see an entirely different picture. More complicated practice structures coupled with regulatory compliance, Physician Payment Reform, automation, and tighter practice margins have created the need for far more sophisticated and skilled office managers. Proven managerial skills and experience are now imperative.

However, the fact that today's practice managers have managerial skills is not enough. Physician practice owners must learn how to direct and develop these office managers so they can put these skills to use most effectively. In

‘More complicated practice structures coupled with regulatory compliance, Physician Payment Reform, automation, and tighter practice margins require more skilled officer managers in these “interesting times.”’

other words, physicians must learn to manage their office managers.

Developing An Empowering Structure

The art of effectively managing an office manager is not only a process but a philosophy as well. It is a philosophy which transports physicians from the belief that they can and should be responsible for all aspects of their medical practices, to the belief that they can better serve patient needs by delegating the responsibility and authority for non-patient care duties to someone else.

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This article was prepared at the request of the *Journal*. Those wishing to contribute articles to this Section should submit them to the Managing Editor of the *Journal*.

The first step in cultivating this philosophy is to develop a clear consensus among the physicians in your practice concerning its mission and goals, and the role your office manager will play in helping you reach these goals.

Then you must create a management structure which positions your office manager as the “lynch pin” and empowers him or her to implement the policies and management decisions you and your fellow physicians have agreed upon. This “corporate” structure is extremely effective because it allows physicians to focus on patient care while maintaining final authority through executive overview.

Define Expectations

Once the management structure is in place, the next step is to define and communicate exactly what is expected from your office manager. Start with a documented job description that includes not only specific tasks but also the ultimate goal of these tasks. These tasks and goals should be tied directly to the overall mission and goals of the practice. For example, one responsibility of the office manager may be to improve cash flow by reducing accounts receivable to 60 days. This task should be presented so that the office manager understands its effect on the primary goals of the practice to improve financial stability. Another example may be to charge the office man-

ager with reducing patient waiting time by improving appointment scheduling. This task should be related directly to the overall practice goal of improving patient satisfaction.

In most cases, in addition to being responsible for overall practice management, office managers for solo practitioners and smaller practices are responsible for performing additional duties such as accounts receivable management. The question is, when does a practice become large enough to warrant a full-time office manager?

According to Tom Blanchard, author of *The One Minute Manager*, and founder of the Blanchard Group, "when five or more employees are grouped together, the majority of the manager's time becomes devoted to personnel supervision and motivation." In the case of medical practices, however, we have found that office managers should relinquish functional duties and focus entirely on overall practice operations supervision as the practice approaches approximately 10 employees.

Designate Time Frames

After defining responsibilities and tasks, time frames for completing tasks should be established. It's best to develop these time frames cooperatively with your office manager so that potential problems and challenges can be discussed openly. A cooperative approach will help ensure realistic expectations and provide a basis for future evaluation.

Empower With Authority

One of the most powerful techniques you can use to effectively manage your office manager is to empower him or her with the authority to make decisions when they need to be made.

Granting office managers the authority to perform day-to-day opera-

tional duties such as reprimanding employees, handling patient complaints, or negotiating equipment leases not only allows physicians to remain focused on patient care, it places authority firmly within the office manager's position so that there is a true basis for accountability when practice goals are achieved and when they are not.

Communicate Openly

Practice managers are responsible for maximizing all practice resources, from computerized management information systems to personnel. In order to do this, office managers must be able to communicate ideas and concerns in a non-threatening environment, and they must feel free to offer suggestions for change.

Regularly scheduled management meetings are the perfect communications vehicle. Such meetings maintain two-way communication between physicians and office managers, and at the same time, provide a forum through which physicians can keep in touch with the pulse of their practices without day-to-day involvement.

Through regularly scheduled management meetings, office managers can keep physicians up-to-date about the latest financial management information and analysis. These meetings also provide a vehicle through which office managers can confidentially discuss personnel problems and accomplishments.

Provide Feedback and Evaluation

Physicians must recognize that effective office managers are an integral part of the practice team and that they play a significant role in overall practice success. Therefore, it is important to provide on-going feedback concerning their performance. Office managers need to

know when and by what standards they will be evaluated.

Feedback on performance should be provided frequently, through daily, on-the-spot verbal praise and thanks, and if necessary, through constructive criticism. Additionally, a consistent system of evaluation, reward, and compensation should be put in place. The office manager's job description and position objectives should be the basis of performance evaluations.

The Bottom Line

When physicians apply the above strategies and manage their office managers, the bottom line will be optimum patient care in the most cost-effective and efficient manner possible. The reason is, these strategies direct physicians away from the details of day-to-day operations and allow them, instead, to focus attention on their primary responsibility of providing excellence in patient care. While it may take a while for physicians to become used to this new perspective, it will be well worth the effort.

Needed: Improvement in the Relationship Between Medical Staffs and Hospitals

Gwynne T. Brunt, Jr., MD, FACR

WELCOME to a new regular monthly feature of the *Journal* — "Hospital-Medical Staff Issues." It is a signal honor to have been asked to write the first article in this increasingly important arena. Having recently returned from the AMA-Hospital Medical Staff Section Meeting in Chicago, I approach this opportunity with an assortment of emotions — pride, enthusiasm, excitement, and — concern.

Pride, in being a physician and a member of the most respected profession in our society; in being a part of the world's most advanced and technologically innovative health care system; in being a part of organized medicine and having a voice, with the possibility of influencing the future direction of health care delivery in our country.

Enthusiasm and excitement, about where we have come from, what we have accomplished, where we are going, and what challenges and obstacles lie ahead if we are to enhance and build upon the rich legacy that has been handed down to us by those who passed before.

Concern, in the areas of medical staff governance and bylaws, economic credentialing, exclusive contracting, health care reform, and the future direction of the JCAHO.

The current overriding concern, however, is the enormous potential for, and seemingly inevitable, hos-

Declining hospital revenues and increased competition among hospitals have contributed significantly to the increasing conflict and tension between hospitals and their medical staffs. 9

pital-physician conflicts we may expect to encounter with increasing frequency in the decade of the 90s. Recent actions by the American Hospital Association (AHA), its members, and their related organizations have offended and provoked large numbers of physicians which suggests they share responsibility for the growing antagonism between hospitals and their physicians.

We are all aware that the rapidly escalating costs of health care in this country have caused government and business to look for new ways to slow the growth of this upward spiral. Many of the methods employed to date, e.g.,

hospital DRGs, insurance companies' utilization review, and alternative health care delivery systems with their demands for large discounts, have led to diminished hospital utilization and occupancy rates, as well as a trend to provide more health care in non-hospital settings. The end result is declining hospital revenues and increased competition among hospitals, especially those in the larger urban areas where there is almost always an excess hospital bed capacity. This over-simplified statement of the current situation in American health care delivery is at the core of the increasing conflict and tension between hospitals and their medical staffs.

Together, we as physicians and hospitals must recognize and address this issue in an appropriately responsible manner in order to achieve our goal of providing the best and most cost-effective health care to our patients. If we are to be successful, hospital administrators and physicians must stop antagonizing one another and work together.

Recently, the AHA issued its revision of the "Patient's Bill of Rights" in which all references to physicians were deleted, substituting instead the term, "caregivers." Such "caregivers" will presumably give complete information about diagnosis, management, treatment plans, and prognosis to patients. This would appear to be a deliber-

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ate step to push the physician into a subordinate position and allow the hospital to make the determination as to who the "caregiver" will be.

“The AHA has devised and begun to push its own universal hospital-based health care access proposal in which “Community Care Networks,” dominated by the local hospital, would be the hub.”

In addition, the AHA has devised and begun to push its own universal hospital-based health care access proposal in which “Community Care Networks” dominated by the local community hospital would be the centerpiece or hub. These “networks” would then control the resources of that particular entity and would be responsible for providing care and making decisions as to what type of “caregivers” would be able to deliver care to its enrollees. Physicians would become just one more provider of health care to which the health care “network” (run by hospitals) could or could not direct care.

These “networks” would be based largely on total managed care with capitation as the only system of initial payments. The funding for these “networks” would eventually come from one source, although there would still be employer, employee and government responsibility (modified “pay or play”). Reimbursement rates would be set by the government.

Besides establishing global fees funneled to all providers through the hospital dominated “network,”

with the attendant problems of how these fees would be fairly and equitably distributed, the AHA proposal appears to eliminate patients’ freedom to choose their physician and their health care delivery system by calling for substantial co-payments for fee-for-service care.

And finally, the Healthcare Advisory Board, a Washington, D.C., organization whose membership includes hospitals throughout the country, including 19 of the larger, more well-known, Georgia hospitals, recently issued a 250-page document entitled “Competitive Strategy: 10+ Long-Term Strategic Positions for Hospitals.” This treatise describes various strategies hospitals may employ to “guarantee future revenue stream [and] improved margins in times of intense competition.”

Furthermore, this study advocates gaining control of physicians as the “top priority” survival strategy. The best way to control physicians, according to the document, is to employ them. As employees, the hospitals can limit utilization, ensure referrals, and gain de facto control over payors. The Advisory Board concludes that although this strategy poses a significant risk of offending physicians, the issue for hospitals is whether the long-term potential warrants the risk. The authors answer their own question with a resounding, “Yes!”

The authors also state that having physicians as partners is an excellent strategy for long-term survival, though not as desirable as employing physicians. As for a third strategy, having physicians own the hospital (as suggested by Senator Dave Durenberger of Minnesota, author of still another health care reform plan, “Third Course Agenda”), the Advisory Board concludes: “Hospitals not in dire financial straits may find abdicating 100% of control to physicians too extreme a measure to stomach.”

Without question, this document confirms the fact that many hospital administrator-types view physicians as the major obstacle in their quest to control the entire health care system. Hospitals are urged to vigorously pursue the acquisition of primary care and specialty physicians’ practices as the preferred method of implementing the vertical integration of the health delivery system, thereby protecting the long-term profitability of the institution. The rationale is that ownership of a physician’s practice gives the hospital the upper hand in determining how care is delivered, how much care is delivered, and which patients will be treated at all. In short, these hospital industry consultants have concluded that it is essential to gain control by making certain that physicians are put in a subservient role to the hospital administration.

Many hospitals now believe that their ability to control physicians is critical to their bottom-line results. The right physician, under hospital control, can steer large numbers of paying patients to the hospital and generate significant profits for the institution.

“The movement by some in the hospital industry to reduce physicians to the status of employee has grave consequences for the patient/doctor relationship.”

However, a physician with the wrong mix of patients (usually very sick and underinsured) can cost the hospital large sums of money. Thus, the hospitals feel the need to dictate which physicians can use

the hospital and how they use the hospital, i.e., "economic credentialing."

It would appear that the goal of a large segment of the hospital industry is to reverse the traditional relationship which has medical staffs exerting tremendous influence over the medical decisions being made in the hospital. In the new relationship being proposed by these hospitals, physicians will be in a position of serving the needs of hospital management. It is inevitable that this type of relationship will force physicians to focus on the bottom-line financial concerns of the institution rather than the clinical concerns of the patient.

It is worth noting that this new relationship between hospitals and physicians is being put forth with very little public discussion. It is not even recognized by many rank-and-file physicians as being a serious issue, much less by the average health care consumer and potential patient. Obviously, the shift in power over medical decisions from physicians to corporate hospital bureaucracies is not in the best interest of the patient/consumer. Secondly, full implementation of this structured reconfiguration by hospitals would involve tremendous negative consequences to the legitimate economic interests of physicians. Finally, an institutionally driven system could prove disastrous for both public and private payors.

The movement by the hospital industry to reduce physicians to the status of employee has grave consequences for the patient/doctor relationship. By reducing the influence of the medical staff within the hos-

pital and placing constraints on the physician's decision-making power, the hospital is able to make the financial concerns of the institution its top priority. Thus, the physician's professional ethic is supplanted by the hospital's business ethic. In the end, the patient/doctor relationship would be replaced by a relationship between a health care "consumer" and a corporate hospital bureaucracy. For these reasons, it is essential that physicians stand united and oppose the inappropriate intrusion of the hospital industry into the practice of medicine. The stakes have never been higher for physicians and our patients, and our unity and resolve have never been more important.

In Georgia, we as physicians and hospitals have been able to work relatively harmoniously, and to resolve our differences in a gentlemanly give-and-take fashion. Recently, however, physicians have witnessed some of our hospitals increasingly rely on extremely *hospital-oriented* (as opposed to *physician-oriented*) law firms such as Harty, Springer, & Mattern of Pittsburgh, Pennsylvania, to revise medical staff bylaws in a manner unquestionably disadvantageous to physicians of the medical staff. Some of our hospitals regularly send their governing board members to Estes Park Institute Seminars, another hospital-oriented, as opposed to physician-oriented organization, chaired by Mr. John Harty of Harty, Springer, & Mattern.

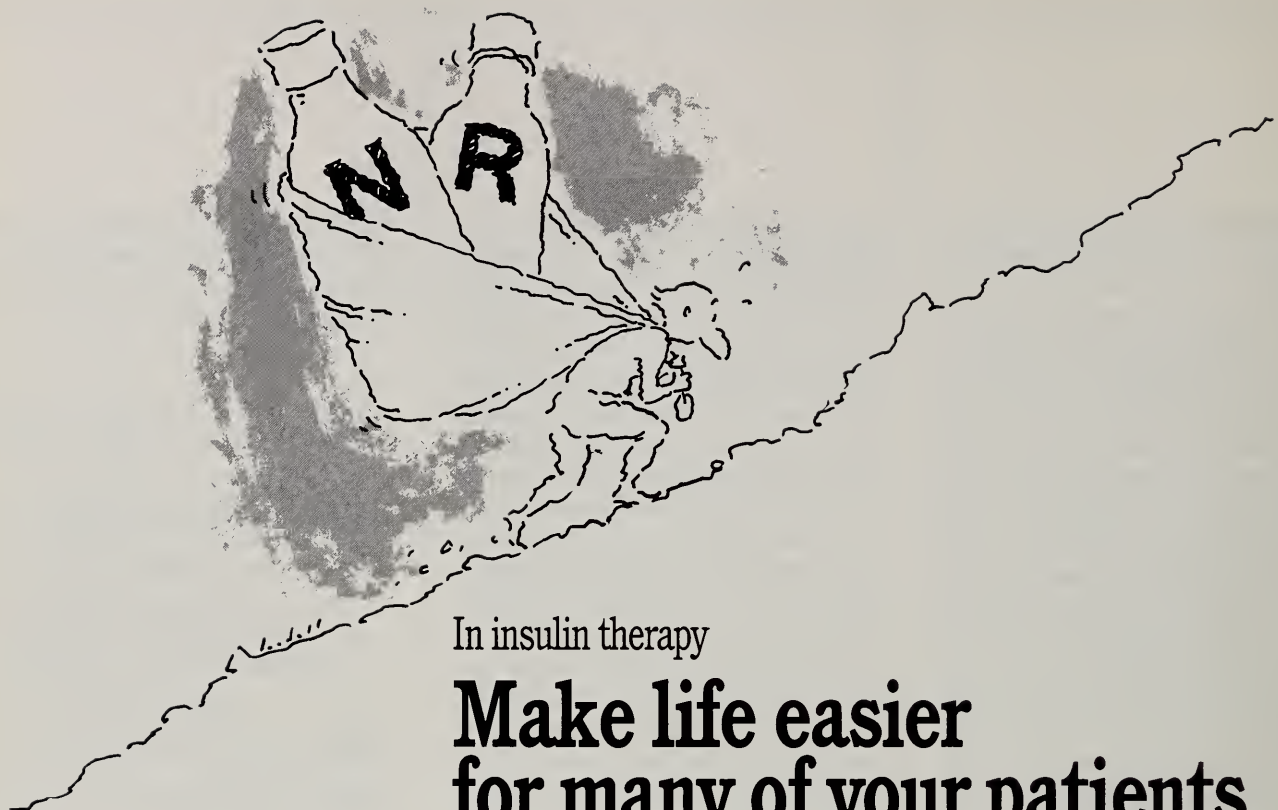
We, as physicians, have a sincere desire to work closely with our hospitals to accomplish our collective mission and goals. But, if we are to

be successful in this joint endeavor, physicians have a right to demand and expect that we will be treated as full and equal partners in the decision-making processes of our hospitals. In turn, this requires greater participation at the board level by more physicians than has occurred in recent times.

Hospitals, many of which were begun by some of our older colleagues, and physicians have reason to be very proud of all that we have accomplished together in Georgia. The times ahead will certainly be challenging, and hopefully gratifying, interesting, and, maybe, even fun. We must not rest on past laurels, sit back, and wait for the world to come to us. Rather, we must put to good use our fighting spirit, our integrity, and our tenacity in an effort to analyze our environment and march forward with purpose and direction. We must aggressively pursue the best interests of the patients we serve and of our profession. We must play to win — and, with physicians and hospitals working together, **WE WILL WIN!**

Suggested Reading

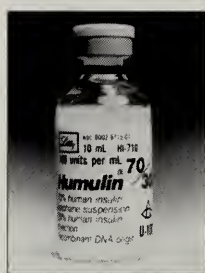
1. Hospital Medical Staff Legal Issues. An Update from the Office of the General Counsel. May 26, 1992.
2. Hospital Programmatic Initiative Directed Toward Control of Delivery of Physicians Services. Capital Physician Quarterly Magazine, June, 1992.
3. Resolutions 7, 9, 11, and 14 presented to the American Medical Association Hospital Medical Staff Section, June 18-21st, 1992, Chicago, Illinois.
4. Resolution 123 presented to the American Medical Association House of Delegates, June 20-25th, 1992, Chicago, Illinois.
5. Chairman's Address to the AMA-HMSS 1992 Annual Meeting, June 19th, 1992, Chicago, Illinois, delivered by Howard L. Lang, M.D.
6. Competitive Strategy: 10+ Long-Term Strategic Positions for Hospitals. Healthcare Advisory Board. Washington, D.C., 1990. A copy of this document may be obtained by calling Ms. Latricia Beisler of the Advisory Board at 202-544-2700.



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Helpful Hints in Structuring Physician Employment Agreements

Robert N. Berg

THERE IS OFTEN here is an often-heard truism — started and spread, no doubt, by attorneys, accounts and practice management consultants — that “physicians make bad businessmen/businesswomen.” In my experience, the results are mixed: some physicians are skilled negotiators and make sound, well-reasoned business decisions; other physicians, like many other types of professionals, prefer to focus on their professional practice and leave the business decisions to others. When physicians of different levels of business acumen get together to negotiate a deal (such as an established physician and a young resident, discussing the terms of prospective employment), the results may often be less than satisfactory. Significant points may be left unnegotiated, for fear of raising ill feelings; one side or the other may choose to adopt a “take-it-or-leave-it” attitude, effectively eliminating any meaningful negotiations; verbal agreements may be reached which are never reduced to writing.

A significant part of our practice involves assisting physician employers and employees in structuring physician employment agreements. In this month's Legal article, we provide some helpful hints, which, if followed, may make the process of hiring or becoming a physician employee a more pleasant and satisfying experience.

Put It In Writing!

Most physician employment

agreements contain what is commonly referred to as an “entire agreement” provision. Typically, this provision states that the entire agreement of the parties is included in the written agreement; all prior negotiations, verbal promises and the like are superseded by the written agreement and are of no further force and effect. A typical provision then goes on to provide that the written agreement cannot be amended or modified, other than by a written amendment or agreement, signed by the parties. The legal significance of this provision is obvious on its face — if it isn't in the written agreement, it doesn't count.¹

What is not so obvious, however, is the fact that the written physician employment agreement can be viewed as a type of insurance, designed to govern the rights and obligations of the parties if the employment relationship goes sour. Physician employer/employee relationships are like marriages: some start out wonderful and, despite periodic peaks and valleys, essentially remain that way throughout the relationship. In those cases, the written employment agreements remain tucked away in some drawer or filing cabinet. Any disputes between the parties are resolved amicably, by handshake; in practical

terms, the written agreement between the parties matters very little.

Alternatively, some physician employer/employee arrangements end in disappointment: physician employers, for example, become less than satisfied with the level of skill, or temperament, or personality, of their employee; or, physician employees are “left at the alter,” having been promised an ownership interest after a few years, a promise which evaporates at the stated buy-in time. It is in cases like these — when the parties are incapable of reaching handshake agreements — that the only thing that matters is the written agreement. It is then that the written agreement comes out of the drawer, or the filing cabinet, and, in many cases, ends up in the office of an attorney.

The bottom line: as distasteful as it is to think “negative thoughts” at the beginning of an employer/employee relationship, it is critical for physicians to recognize that the real importance of the written employment agreement surfaces only when the parties cannot resolve disputes informally. In those situations, if you don't have the promises in writing, then you probably don't have the promises at all.

Tailor Compensation and Benefits to Meet the Specific Situation

At seminars and meetings, we are repeatedly asked the same types of questions, dealing with

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compensation and benefits: How much salary should I ask for (or pay)? Should I ask for (or pay) a bonus? What type of benefits should I ask for (or offer)? We can answer these questions in part, giving the physician employer or employee a feel for the "standard" compensation and benefit packages offered in the community. In some respects, however, this answer is a disservice to the parties, to the extent that it fails to take into account their particular situation and needs.

In our view, the most significant part of the equation in structuring compensation and benefits is understanding the specific needs of the employer and employee, as well as the amount of "risk" they are willing to take or share. For example, in the situation where the prospective employee is single, renting a small apartment and very confident of his or her ability, it may make sense to structure a compensation package that includes a small fixed base salary, together with the potential to receive a large bonus, based on some objective criteria (e.g., a percentage of collected revenues of the practice).

On the other hand, where the prospective physician employee is married with a family, has just moved into a new community and has a large house with a large mortgage, an arrangement which provides most of the compensation in the form of a fixed based salary may be more appropriate, at least during the first year or two of the employment relationship. (Obviously, this is not a one-way street, and the needs of the employee in a particular case may not match the desires of the prospective employer. Nonetheless, these types of issues should be discussed fully at a fairly early stage of the negotiating process.)

A similar type of analysis should be undertaken with regard to the benefits offered by the physician

employer to the prospective employee. Some employees may have little interest in insurance issues, but may desire a large allowance for continuing medical education, professional dues and journals, etc. Conversely, the provision of major medical, disability and life insurance may be quite important to the prospective employee. Again, the desires of the employee may not jive with the resources of the employer in a particular case. Nonetheless, **the bottom line:** employee compensation and benefits issues should not be etched in stone. Employees should not be afraid to request a modified compensation arrangement designed to fit their needs, and to ask for benefits which are important to them; employers should be open-minded and flexible as to the need to provide not only adequate compensation, but also adequate benefits.²

Understand Termination Issues and Consequences

Physicians discussing the start of a new employment arrangement may be hesitant to spend a lot of time talking about termination issues. Predictably, this may be counterproductive, to the extent that it oftentimes leads to unfortunate "surprises" when that relationship deteriorates.

Customarily, physician employment agreements may be terminated in four ways:

- (1) By the physician employer, without cause (i.e., for any reason, whether or not the employment agreement has been breached). Typically, termination without cause is effected by given prior written notice, anywhere from thirty to ninety days prior to the effective date of termination;
- (2) By the physician employee, without cause. Again, prior written notice is usually required, so as to give the physician employer an opportunity

to make alternate arrangements for providing care to his or her patients.³

- (3) By the physician employer, for cause. The written agreement may provide several bases for termination, including (a) loss of license; (b) loss of medical staff membership or clinical privileges at a local hospital; (c) breach of the employment agreement; (d) conviction of a crime involving moral turpitude; or (e) other acts detrimental to the best interests of the employer. Some of these grounds may result in termination immediately (e.g., loss of license); others may require written notice and an opportunity to cure (e.g., breach of a material term or condition of the agreement)
- (4) By the physician employee, for cause. This is the most unusual case, but it might come into play, for example, if the physician employer were to fail to pay the employee's salary in a timely manner.

Even a cursory review of these four situations indicates that the level of "fault" is different in each, as are the intentions and motives of the employer and employee. Nonetheless, employment agreements often treat all of these terminations the same, in terms of the rights and obligations of the parties upon termination of the agreement. Specifically, on termination of the agreement, issues arise concerning how much severance pay, if any, will be paid to the employee? Will the employee be entitled to all or a portion of his or her bonus, if the employment agreement is terminated prior to the end of its term? Will the employees be subject to a restrictive covenant? Obviously, these provisions may have a significant impact on the financial futures of the physician employer and employee.

In some cases, the employer may

insist on treating all termination events in a similar manner. In other cases, the parties may negotiate the terms and conditions of termination, having them vary depending on the significant events involved.

The bottom line: it is critical to understand, up front, the grounds upon which either side may terminate the agreement, and the rights and obligations of the employer and employee upon termination.

Don't Be Afraid of Restrictive Covenants

Physician employers and employees tend to look at restrictive covenants — agreements prohibiting an employee from engaging in competition with the employer in a stated geographic area and for a stated period of time, following termination of the employment agreement — at the extremes: the physician employee tends to believe that restrictive covenants are against public policy, and thus void; physician employers tend to feel justified in seeking expansive restrictive covenants, prohibiting the former employee from ever again competing with the employer. In Georgia, as in most States, reality lies somewhere between these extremes.⁴

Restrictive covenants are a proper point of discussion in any employment agreement negotiations. The employee needs to understand that the physician employer has a reasonable basis on which to seek protection, in the event that the employment arrangement does not work out; the physician employer has provided the employee with a place to practice, access to his or her patients, introductions to professionals/referral sources in the community, and the like. In turn, the physician employer needs some assurances that the employee will not take this valuable "asset", terminate the employment arrangement and set up shop next door, in competition

with the employer. The restrictive covenant serves this purpose, by imposing limits on the employee's ability to compete with the former employer following termination of the employment agreement, as well as to use the employer's confidential or proprietary information or pirate the employer's other employees.

The other side of the coin is that the restrictive covenant should be reasonable and tailored to the specifics of the situation, in terms of the time and territory elements, and also, in terms of the description of the type of medical practice in which the employee will be prohibited from engaging, following termination. For example, if the employer's patient base lies almost exclusively in one county, it may be unreasonable for the employer to attempt to restrict the employee's practice, following termination, to a multi-county area. (More than being unreasonable, expansive efforts of this type may also result in the entire restrictive covenant being held unenforceable).⁵ Similarly, if the term of the employment of the employee is less than one year, it may be unreasonable to seek to impose the restrictive covenant on the employee, following termination, for a period of five or ten years. Similarly, if the employee is a physician with several specialties, but has only engaged in the practice of one specialty for the employer, it may be unreasonable for the employer to seek to restrict the employee from engaging in the practice of all of his or her specialties, following termination of the employment agreement; there would be no reasonable basis for such a restriction, and it would not be enforced by courts sitting in Georgia.

The bottom line: employment arrangement negotiations should include meaningful discussions on the need for and scope of any proposed restrictive covenants. In the end, the restrictive covenant in-

cluded in the employment agreement should be tailored to the reasonable needs of the employer, without unduly restricting the actions of the employee following termination of the employment agreement.

Conclusion

Written employment agreements are a necessary and important part of creating and structuring the employment arrangement between a physician employer and prospective physician employee. The negotiation of these agreements need not be an unpleasant task, so long as the parties to the agreement understand that meaningful discussions before the agreement is signed — including discussion of "negative" issues such as how to deal with disputes between the parties or the termination of the relationship — may serve a valuable purpose, in terms of protecting the rights of the parties in the event that the employment arrangement does not work out. In our experience, a well-negotiated employment agreement can eliminate subsequent surprises, not to mention saving the employer and employee a lot of time, money and grief.

Notes

1. Berg RN. Understanding legal boilerplate. *J Med Assoc GA* 1988;77:906.

2. Indeed, we have found that, in some cases, preliminary discussions concerning benefits can serve to educate physician employers who have not been in the employment market for a while, most notably with regard to issues concerning profit-sharing and retirement plans.

3. Where the termination occurs without cause, the physician employer usually is given the option of continuing to employ the physician employee until the stated termination date or, instead, to terminate the employment immediately by paying the employee's salary through the stated termination date.

4. Robb CM. Restrictive covenants law in Georgia: Back to the drawing board. *J Med Assoc GA* 1991;80(3).

5. See e.g., *A.L. Williams & Associates v. Stelk*, F.2d , 1992 CCH Trade Reg. Rpt. 69,827 (11th Cir. 1992) (restrictive covenants in insurance underwriter employment agreements were not limited in scope as to territory and were unenforceable, applying Georgia law.).

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Investigating SIDS and Other Infant Deaths

Joseph L. Burton, MD

Overview

INVESTIGATION INTO the cause of death requires a multi-disciplinary, multi-faceted approach. The postmortem examination/autopsy supplies one component of the information needed to determine why a death has occurred. In some cases, these procedures yield sufficient information to enable us to isolate the cause(s) of death. However, the postmortem/autopsy often provides less data than other investigative procedures, particularly in the case of infant deaths.

Thirty percent of deaths that occur between the ages of 1 week and 1 year will be diagnosed as Sudden Infant Death Syndrome (SIDS). Ninety-eight percent of affected infants die between the ages of 1 week and 12 months, with a peak incidence, 95 percent, dying between 3 and 4 months of age.¹ Existing research indicates there may be a pathological finding unique to and common in all authentic SIDS deaths. Some studies have examined the presence of focal areas of gliosis (scarring) in areas of the brainstem.² Other studies have in-

It is imperative that the medical examiner thoroughly evaluate all available data without bias, base conclusions on established scientific and medical principle, and then temper those conclusions with common sense reasoning.

vestigated the significance of persistently elevated fetal hemoglobin in some SIDS deaths.³

The lack of a universal SIDS definition presents a major barrier to both research and our ability to establish an infant's cause of death. Our office uses the following working definition: SIDS is a death occurring in an otherwise seemingly healthy infant, where the death in-

vestigation, postmortem examination/autopsy and toxicology studies reveal no other specific or reasonable explanation. Even when a death occurs outside of the established age parameters, we will classify it as SIDS if all other findings satisfy the accepted criteria and fail to suggest any other acceptable explanation. However, we note that the infant's age is slightly outside the normally accepted parameters for most SIDS deaths.

Some investigators have suggested that many deaths, which actually resulted from pneumonitis, have been inaccurately classified as SIDS.⁴ My policy is that if the infant had been clinically ill, and the autopsy either macroscopically or microscopically reveals unquestionable viral or bacterial bronchopneumonia, we classify the cause of death as a bronchopneumonia or viral pneumonitis. However, infants who may have had mild respiratory tract symptoms, but whose macroscopic and microscopic findings do not substantiate a well defined infectious disease process, are not excluded from the SIDS classification.

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With respect to alcohol or other drugs in the blood, each case must be individually scrutinized. When cocaine, amphetamines or amphetamine-like substances are present in an infant's blood, my policy is to classify the death as drug related as opposed to SIDS. The presence of alcohol in the blood is somewhat more complicated, as many over the counter cough remedies contain alcohol, sometimes in significant quantity.

This type of case exemplifies the need to scrutinize all factors rather than rely on the toxicology profile as the sole piece of evidence used to determine the cause of death. A .01, .02 or .03 grams percent blood alcohol in an infant who otherwise meets the established criteria for SIDS is so classified by our office. However, we support the general consensus that once the blood alcohol level surpasses .03 grams percent, alcohol may have contributed to respiratory depression and may have contributed to the infant's death.^{5,6}

The pathologist needs to study each section of the death investigator's report — infant and family medical records, scene evidence, photographs, videotapes, witness statements — before performing the postmortem examination and autopsy.

Other pharmacologic preparations, including antihistamines and ephedrine like compounds, are more difficult to evaluate. Paramet-

ters for determining toxic levels of these drugs are minimal. Each case must be evaluated in its entirety and in consultation with other individuals or toxicology labs familiar with the drug in question. I often classify these deaths as Sudden Unexplained Death of Infancy in lieu of using the term SIDS. I note that although this case may be a SIDS death, the presence of certain drugs, whose levels are difficult to interpret, make a specific determination difficult.

The presence of any documentable heart defect, central nervous system defect, pulmonary pathology, or other major organ system pathology would, in most cases, exclude a finding of SIDS. Though some investigators consider apnea of infancy to be a reasonable explanation for SIDS, a well documented clinical history of apnea or cardiac arrhythmias should also typically exclude a SIDS classification. It is imperative that the medical examiner thoroughly evaluate all available information without bias, base conclusions on established scientific and medical principle, and then temper those conclusions with common sense reasoning.

Death Investigation Protocol

A death investigation protocol form is more than a check list. It is a record of information and observations that explain why and how a death occurred. To investigate the sudden, unexpected death of an infant, it is essential to gather data from 3 major sources: (1) the case history of the infant, (2) the family's medical history, with emphasis on the neonatal histories of all surviving and deceased siblings, (3) an investigation of the death scene. Conducting a scene investigation includes gathering physical evidence, obtaining witness statements, taking photographs, and videotaping evidence as indicated.

Though an extensive form would be beneficial for demographic and other research studies, investigators

in states that developed multi-page instruments have met with considerable opposition and found their forms are not routinely used. It is essential that the form developed take into account the time constraints of the investigators respon-

Infant death investigations require procedures and documentation beyond those protocols mandatory for the general population.

sible for its completion. Our office developed a one-page questionnaire which, when completed, enables us to determine the cause of death and alerts us to any factors that indicate the need for a more thorough investigation. Though an earlier two-page version met with considerable opposition, our one-page form has been well received by Georgia law enforcement officers, coroners and other pathologists.

The pathologist needs to study each section of the death investigator's report — infant and family medical records, scene evidence, photographs, videotapes, witness statements — *before* performing the postmortem examination and autopsy.

The term *postmortem examination* denotes an external examination of the body, possibly drawing blood or urine. By contrast, an autopsy, which includes a postmortem examination, refers to a complete internal evaluation of the body. The principle of brevity we applied to developing our death investigation questionnaire also proved useful in devising our Autopsy Protocol Form. Too frequently, multi-page forms have

TABLE 1 — Postmortem Examination/Autopsy Investigation of Infant Deaths

Basic Protocol:

- I. Brief history of case information.
- II. General description of infant as to:
 - A. Size.
 - B. Weight.
 - C. Hygiene.
 - D. Nutritional state.
 - E. Hydration.
 - F. Is overall appearance consistent with chronological age?
- III. Basic measurements to obtain:
 - A. Weight.
 - B. Crown heel length.
 - C. Crown rump length.
 - D. Head circumference.
 - E. Chest circumference.
 - F. Abdominal girth.
- IV. Description of each anatomical region such as head, neck, torso, upper extremities, lower extremities, genitalia, and anus and should specifically include descriptions of:
 - A. Injuries.
 - B. Developmental defects.
 - C. Asymmetry.
- V. Description of genitalia and anus.
- VI. The clothing description is included in all of our reports and may be important for various reasons.
- VII. The internal examination should include description of:
 - A. Bony thorax and axial skeleton.
 - B. Body cavities-fluid, adhesions, etc.
 - C. Each organ described weighed and sectioned for histology.
 - D. Stomach contents described.
 - E. Bladder — full and/or empty.
- F. Neck including descriptions of:
 1. Hyoid.
 2. Thyroid cartilage.
 3. Soft tissues.
 4. Hypopharynx including Waldeyer's Ring.
- G. Central Nervous System including description of:
 1. Scalp.
 2. Cerebrospinal fluid.
 3. Brain-describe:
 - a. Meninges.
 - b. Vessels.
 - c. Symmetry.
 - d. Ventricles (micro to include but not limited to cerebrum, hippocampus, pons, medulla-upper and lower, upper cervical cord, pituitary).
- H. Cultures — If any infection suggested:
 1. Blood.
 2. Lung.
 3. Cerebrospinal fluid/brain.
 4. Other.
- I. Toxicology — to include but not limited to:
 1. Blood.
 2. Bile/urine.
 3. Kidney/liver.
 4. Gastric(total contents).
- J. Miscellaneous:
 1. Sections for bone marrow.
 2. Sections from lymph nodes.
 3. HIV any indication for this alluded to in investigation such as maternal intravenous drug use, etc.
 4. If procedures are available full body x-rays to rule out old or recent fractures or developmental abnormalities.

been devised without considering the time constraints of the coroners and pathologists who would be responsible for their completion. For example, many reports contain multiple growth and development charts. While useful for research purposes, it is unlikely that the forensic pathologist will have either the time or personnel to complete these charts. However, when apprised of the type of data needed to research infant deaths, pathologists are usually amenable to reasonably expanding or altering their reporting style to meet the researchers' needs.

The Postmortem Examination/Autopsy Protocol discussed here, and outlined in Table 1, is only a guide. The important point to remember is that every pathologist needs to acquire a basic under-

standing of what to look for in any infant death. Infant death investigations require procedures and documentation beyond those protocols mandatory for the general population. A comprehensive autopsy report tells a story; it paints a picture of what the pathologist observed. So the report should contain a section that provides insight into the opinions and thought processes of the examining pathologist.

The procedures begin by observing and documenting the infant's appearance. Was the infant normal in size, weight, nutritional state, and hydration? Taking into account that premature infants may fall below the normal standard deviations in some growth charts, are all observed parameters consistent with the chronological age of the infant? Is the body symmetrical? The state

of hygiene is also important. Is the infant's skin and hair clean?

Are there sores on the body? Are there any injuries, either slight or significant? Do these injuries appear to be of varying ages or are they all recent? The sclerae and conjunctivae of the eyes, the nasal apertures, ear canals, the mucus membranes of the oral cavity, and frenulum of the lips and gums must be carefully examined. Pathologists also need to be familiar with the appearance of the normal genitalia and anus as well as their normal variants to accurately identify any abnormalities. All findings should be meticulous documented.

All organs should be carefully examined both macroscopically and microscopically. Blood and other body fluids should routinely be

taken for toxicology studies. In applicable cases, cultures are also necessary. Toxicology screens should include alcohol, tranquilizers, sedatives and the usual drugs of abuse that are known or thought to be used in the geographic area. Unusual discoloration or odors should be noted, and careful attention should be given to the contents of the stomach.

The neck should be carefully dissected, paying special attention to the hyoid bone and thyroid cartilage. The hypopharynx should be examined and Waldeyer's Ring carefully evaluated. As concern has been raised about gliosis in the brainstem,² its careful microscopic evaluation is important. Routine sections of the heart should include interventricular septum, area of the SA node, and a section including endocardium and epicardium. Photographs that would document any significant findings should be taken. In complex cases, the pathologist should not hesitate to seek a second opinion.

After completing an autopsy, I certify the death as SIDS if all parameters support this finding and no evidence uncovered would be inconsistent with such a determination. However, I always note on the report that this conclusion is based on preliminary information and subject to reevaluation should new data, suggestive of other possible causes of death, become available. When our office certifies SIDS as the cause of death, we send a per-

sonal letter to the infant's family expressing our condolences and explaining how we made our determination.

Georgia's Sudden Infant Death Research Foundation has heightened our interest in instituting autopsy protocols that can more readily differentiate SIDS from other infant deaths.

We also notify the Georgia Sudden Infant Death Research Foundation. Our office works very closely with this organization, notifying them of all SIDS related deaths. They have trained volunteers available to provide individual and group support to the families. Through their involvement with pathologists and death investigators, Georgia's Sudden Infant Death Research Foundation has heightened our interest in instituting autopsy protocols that can more readily differentiate SIDS from other infant deaths.

Conclusion

Death investigation is complex. The dead can give us the answers, but we must first ask the proper

questions. While we have come to accept the occurrence of death from aging, accidents and murder, it is deeply disturbing to be confronted with the death of an infant. It is even more disturbing when, after a thorough investigation, we cannot tell parents exactly why their son or daughter died.

As physicians, and as people concerned about the lives of others, we all have a responsibility to promote research that will unlock the mystery of SIDS. It is incumbent upon pathologists to adopt a uniform autopsy protocol if we are going to accurately distinguish SIDS from other infant deaths. Obstetricians, pediatricians and family physicians must be able to identify infants who might be at greater risk in order to offer management recommendations and support to families. Hopefully, through our combined efforts, we will be able to effect a reduction in the number of Georgia infants who die unnecessarily each year.

References

1. Krous HF. Pathological considerations of sudden infant death syndrome. *Pediatrician* 1988;15:231-239.
2. Kenny HC, Burger PC, Harrell FE Jr, Hudson RP Jr. Reactive gliosis in the medulla oblongata of victims of sudden infant death syndrome. *Pediatrician* 1983;72:181-187.
3. Giulian GG, Gilbert EF, Moss RL. Elevated fetal hemoglobin levels in SIDS. *N Engl J Med* 1987;316:1122.
4. Beckwith BJ. The sudden infant death syndrome. *Current Problems in Pediatr* 1973;3:1-77.
5. Leung AK. Ethyl alcohol ingestion in children. *Clin Pediatr* 1986;24:470.
6. Lovejoy F. Ethanol intoxication. *Clin Toxicol Rev* 1981;4:12.

Granulocyte Colony-Stimulating Factor: A New Approach in the Treatment of Childhood Neutropenia

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Introduction

NEUTROPENIA is a disorder characterized by a reduction in neutrophils resulting in an absolute neutrophil count (ANC) of 1500 cells/mm³ or less. When the ANC falls below 1000/mm³, there is a decrease in neutrophil mobilization into areas of inflammation and an increased susceptibility to infection. Gingivitis, otitis, mucositis, and skin infections are common. If the ANC falls below 500/mm³, the severity and frequency of infections is further increased with potentially life-threatening consequences. Infections in these neutropenic patients may include pneumonia, sinusitis, perianal cellulitis, periodontal inflammation, genitourinary tract infection and bacterial sepsis.¹ Typical organisms include *Staphylococcus aureus*, *Escherichia coli*, and *Pseudomonas aeruginosa*, although neutropenic patients are also susceptible to a variety of other bacterial organisms as well. Treatment with multiple antibiotics may result in colonization by resistant bacteria along with secondary fungal infections.

For the purposes of this paper,

The development of G-CSF represents a major breakthrough in the treatment of children with severe chronic neutropenia. Dramatic improvements in the quality of life for these children have been achieved.

we will only discuss the management of symptomatic chronic neutropenia. Children with benign neutropenia of childhood by definition have mild clinical courses and therefore generally do not require medical intervention. Also, children with acquired transient neutropenias, such as those induced by viral infection or medications,

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usually do not require intervention. However, many children with severe neutropenia do require intervention.

Until recently, the only available treatment consisted of attempts to treat each infection-related crisis as it occurred, rather than treating the underlying disorder itself. Fortunately, recent advances now give physicians the ability to prevent the occurrence of life-threatening infections by effectively treating the underlying neutropenia. During the past decade, significant advances in basic science have been made. These advances have expanded our knowledge of how the bone marrow's activity is regulated by glycoprotein hormones called cytokines or colony stimulating factors.²

Granulocyte colony-stimulating factor (G-CSF) is a cytokine which specifically stimulates the proliferation of neutrophil precursors.³ In addition, it is involved in regulation of proliferation, differentiation, and function of neutrophils. G-CSF modulates each phase of the mature phagocyte function,

namely; adherence, chemotaxis, immobilization, phagocytosis, oxidative metabolism, and antibody dependent cellular cytotoxicity.⁴ Rapid progress has been made in identifying, characterizing, and cloning the gene for G-CSF. The ability to produce large amounts of recombinant human G-CSF has made clinical trials possible in various clinical settings.^{2,3}

Pre-clinical *in vivo* studies revealed that G-CSF increased the number of functionally normal leukocytes in mice, hamsters, and non-human primates in the setting of cyclic neutropenia and neutropenia induced by chemotherapy and bone marrow transplantation.^{5,7} Clinical trials have shown very promising results. In similar settings, G-CSF (Neupogen) has recently been licensed by the FDA as an adjunct to myelosuppressive chemotherapy to reduce the incidence of infection as manifested by febrile neutropenia.

In cyclic neutropenia, G-CSF increased neutrophil counts and reduced the number of days of severe neutropenia. This led to a reduction in the incidence and severity of infections.⁸

In children with Kostmann's Syndrome, also known as congenital neutropenia or congenital agranulocytosis, G-CSF has been shown to increase the ANC to a level greater than 1000/mm³ with a resultant decrease in the frequency of infectious episodes requiring hospitalizations and antibiotic use.^{9,10} In chronic idiopathic neutropenia, there has been restoration of a normal ANC without further infections using G-CSF.³

In this paper, we will describe recent advances in the treatment of cyclic neutropenia, congenital chronic neutropenia, idiopathic chronic neutropenia, immune-mediated chronic neutropenia, and neutropenia induced by chemotherapy and bone marrow transplantation. Also, we will present case studies of our experiences in

treating children with cyclic, chronic congenital, and chronic idiopathic neutropenia with G-CSF.

Cyclic Neutropenia

Cyclic neutropenia is a disorder characterized by repetitive episodes of neutropenia occurring every 14-24 days. Ulceration of the mucous membranes, lymphadenopathy, skin and respiratory infections are frequent, but life-threatening infections are rare. The cycling hematopoiesis is due to a regulatory defect of hematopoietic stem cells. Cycling may also be evident in reticulocytes and platelets. The neutropenia generally lasts 3-6 days and may be accompanied by monocytosis.^{1,8}

Perhaps even more significant is the potential application of G-CSF for iatrogenically-induced neutropenia secondary to chemotherapeutic drugs, irradiation, and bone marrow transplantation.

Until recently, management of this disorder consisted of symptomatic treatment including meticulous oral hygiene, antibiotics for infections, and careful observation during periods of neutropenia. Past attempts to ameliorate the neutropenia with androgens and lithium have failed. Bone marrow transplantation has been curative in grey collie dogs; however, widespread application of this treatment in humans is impractical due to the associated significant risks and complications, as well as the absence of a suitable HLA-identical sibling donor in most cases.^{11,12} At our institution, the following two patients with

cyclic neutropenia were successfully treated with G-CSF.

Case #1: A 9-year-old white male was diagnosed with severe cyclic neutropenia at 18 months of age with cycling every 21 days reaching ANC nadirs of less than 100/mm³. Clinically, he developed fever, malaise, mouth sores, and adenopathy with each cycle. In addition, he had a history of pneumonia, periorbital cellulitis, multiple dental caries requiring extractions, and infections of minor skin abrasions. Infections required 5 hospitalizations over a 15-month period prior to G-CSF therapy.

G-CSF was initiated at 5 mcg/kg/day, administered subcutaneously on an outpatient basis. His ANC rose to a maximum of 27,625/mm³. During 5 months of treatment with G-CSF, the patient required no antibiotics and had marked improvement in mouth sores. He developed asymptomatic splenomegaly without thrombocytopenia which resolved when his G-CSF dosage was halved.

Case #2: A 13-year-old white male was diagnosed with cyclic neutropenia at 8 years of age. He cycled every 2 weeks reaching ANC nadirs of less than 500/mm³. He developed mouth ulcers with every cycle and frequently developed infections of his fingers and toes. In addition, he had multiple episodes of bronchitis, otitis media, adenitis, and perianal cellulitis. To further complicate his clinical course and add to his morbidity, he had diabetes mellitus and asthma. During the course of several infections, he was hospitalized for diabetic ketoacidosis (DKA).

G-CSF was started at 5 mcg/kg/day. His maximal increase in ANC was 4032/mm³. During the 9 months of treatment, he experienced marked improvement in mouth ulcers with only one hospitalization for DKA with a viral infection and active asthma and one hospitalization for pneumonia with asthma. The patient subsequently

began cycling on G-CSF; however, the cycles occurred every 4 weeks instead of every 2 weeks. This cycling improved when the G-CSF dose was increased as a result of the patient's rapid growth. He also developed mild, transient thrombocytopenia which resolved.

Chronic Congenital Neutropenia

Congenital neutropenia, also known as congenital agranulocytosis or Kostmann's Syndrome, is a severe disorder associated with a ANC of less than 500/mm³. Bone marrow aspiration revealed failure of development of myeloid cells with a maturational arrest at the promyelocyte or myelocyte level. Associated findings include monocytosis, eosinophilia, and normal or increased immunoglobulin levels. Patients typically experience pneumonia, otitis media, gingivitis, enteritis, peritonitis, meningitis, and sepsis which account for high morbidity and mortality.

Steroids, splenectomy, vitamin B6, and lithium therapy have all been tried, and have failed to alter the severity of neutropenia or affect survival. Bone marrow transplantation has been shown to be curative, however, an HLA compatible sibling donor is available for only 25 to 30 percent of patients.⁹ In addition, the mortality associated with transplantation has limited its successful application.

At our institution, a patient with congenital neutropenia was treated with G-CSF with good results. This 10-year-old white female was diagnosed with congenital neutropenia at 4 months of age. Her ANC remained below 500/mm³, and her clinical course was associated with chronic gingivitis, frequent folliculitis, and persistent otitis media. She had an episode of pseudomonas otitis media which progressed to mastoiditis requiring intravenous antibiotics for 2 months.

G-CSF was started at a dose of 5 mcg/kg twice daily. She experi-

enced a dramatic increase in ANC to a maximum 57,280/mm³ within days after beginning treatment. The dose of G-CSF was then adjusted to maintain an ANC between 1500/mm³ to 10,000/mm³. She was treated for sinusitis, otitis and gingivitis, one episode each. None of these episodes required IV antibiotics or hospitalization.

Chronic Idiopathic Neutropenia

Chronic idiopathic neutropenia is a group of disorders for which the etiology remains obscure. Bone marrow studies of most cases show an increased ratio of immature to mature cells suggesting an ineffective maturation process. In general, lower ANCs are associated with more significant morbidity. Management involves good oral hygiene to prevent recurrent gingival and periodontal infections and antibiotics for infections. Only a few patients have benefitted from corticosteroids and intravenous gammaglobulin, and only a few spontaneous remissions have occurred.¹³⁻¹⁵

At our institution, the successful treatment of two patients with chronic idiopathic neutropenia was possible with the use of G-CSF. The first was a 24-month-old white female with chronic idiopathic neutropenia diagnosed at 9 months of age. Her ANCs were generally below 700/mm³. She was treated with prednisone; however, her ANC only increased to 700/mm³. She had an abscess of her abdominal wall, occasional mouth sores and a history of persistent otitis media for 18 months, requiring multiple antibiotics despite having PE tubes and weekly irrigation.

The patient was treated with G-CSF 3 mcg/kg once daily which resulted in a dramatic increase in ANC to a maximum of 20,000/mm³. During the 6 months of treatment, there was a dramatic decrease in the frequency of bacterial infections, although she had 3 episodes of recurrent otitis media.

The second patient was a 20-month-old white female diagnosed at age 2 months with chronic familial neutropenia, autosomal dominant transmission. Her clinical course was complicated by nasal abscesses, gingivitis, periodontitis, recurrent otitis media, perirectal abscesses, and impetigo occurring more frequently than once a month.

G-CSF was started at a dose of 6 mcg/kg twice daily. Her ANC rose to a maximum of 12,425/mm³ and she maintained a mean ANC of 2188/mm³. During the course of treatment, she developed minimal splenomegaly and thrombocytopenia with a platelet count of 54,000/mm³. Both resolved when her G-CSF dosage was decreased. After the dose reduction, she experienced one episode of gingivitis and one hospital admission for fever with ANC below 500/mm³. The G-CSF dose was gradually increased which led once again to a complete resolution of the neutropenia and improvement in infections, this time without recurrent thrombocytopenia or splenomegaly. She also experienced improvement in infections with this gradually increased dose.

Immune-mediated Neutropenia

Neonatal isoimmune neutropenia can occur when there is maternal sensitization to fetal neutrophil antigen resulting in maternal production of IgG. The maternal IgG crosses the placenta and destroys the infant's neutrophils. The neutropenia is usually profound; however, severe infectious complications are rare. Usually after approximately 7 weeks, coincident with the expected half-life of maternal IgG, the infant's neutrophil count has returned to normal.¹ Transient neonatal neutropenia may also result from transplacental transfer of auto-antibodies from mothers who suffer from autoimmune neutropenia.

Immune neutropenia of infancy

usually requires only conservative management, since spontaneous cure appears to be the rule.¹⁶ For infants with repeated infections, steroids have shown some efficacy. Intravenous gammaglobulin has been a very effective treatment when used both acutely and prophylactically.¹⁷

The role of G-CSF in autoimmune neutropenias has not been investigated as intravenous gammaglobulin has been effective in cases not responding to steroids.^{18,19}

Cancer-related Neutropenia

Chemotherapy-induced neutropenia and its resultant infectious complications are significant obstacles in the treatment of cancer and account for the major cause of morbidity and mortality. In some cases, chemotherapy cannot be given as scheduled because of neutropenia or active infection. Such delays decrease the intensity of treatment. In other cases, decreases in chemotherapeutic dosage are required to prevent profound neutropenia which predisposes patients to life-threatening infections.

Several clinical studies have been done to evaluate the clinical usefulness of G-CSF used in conjunction with chemotherapy in the treatment of adults with a variety of malignancies undergoing intensive chemotherapy. The results demonstrate that G-CSF significantly accelerates neutrophil recovery, thereby reducing the number of days of neutropenia, reducing the number of days of antibiotics used to treat fever and neutropenia, reducing the number of infections, and significantly increasing the number of patients qualified to receive chemotherapy as scheduled.^{2,21-23}

G-CSF has also been used in the setting of bone marrow transplantation. The results demonstrate a reduction in mean time to neutrophil recovery, febrile days, duration of care in reverse isolation, duration of parenteral nutrition for oral mucositis, and duration of hospital

stay.²⁴ In the near future, these advances which have been made in treating adults with chemotherapy-induced neutropenia may be applied to children as well.

G-CSF allows maintenance of the dose and schedule of chemotherapeutic regimens by reducing toxicity, which may lead to achievement of improved anti-tumor response and improved survival rates. In addition, by diminishing the side effects of treatment, more intensive dosage schedules of chemotherapy can be evaluated for improvement in response, and ultimately, improvement in survival rates of patients with cancer.^{25, 26}

Acute myelogenous leukemia (AML) blasts have been shown to possess receptors for G-CSF. Recent studies have also demonstrated that G-CSF stimulated leukemic myeloblasts to proliferate in vitro.²⁷⁻²⁹ These findings have led to a great deal of caution in the use of G-CSF in the therapy of AML. One possibility, however, is the use of G-CSF to induce proliferation of quiescent leukemic cells rendering them more sensitive to chemotherapeutic agents which might result in increased cytotoxicity.²⁹

Conclusions

The development of G-CSF represents a major breakthrough in the treatment of children with severe chronic neutropenias. Dramatic improvements in the quality of life for these children have been achieved by treating the underlying neutropenia rather than merely infection-related consequences. The Emory experience has paralleled these exciting results. All five children with severe chronic neutropenia that we treated as part of a multicenter randomized clinical trial of G-CSF had a good response with minimal toxicity including transient thrombocytopenia and splenomegaly along with transient, spontaneously reversible elevation in uric acid, LDH, and alkaline phosphatase. In addition, none of these patients have

developed tolerance or tachyphylaxis. Bone pain of mild to moderate severity primarily controlled with non-narcotic analgesics was the only other consistently reported side effect of G-CSF and was not experienced by our patients.

Perhaps even more significant is the potential application of G-CSF for iatrogenically induced neutropenia secondary to chemotherapeutic drugs, irradiation, and bone marrow transplantation. By ameliorating the major toxicity of chemotherapy, it is hoped that G-CSF would allow the development of more effective and more intense chemotherapeutic regimens in the treatment of childhood cancers. This, ultimately, would lead to a higher cure rate.

Acknowledgements

The G-CSF used to treat the children cited as examples in this paper was provided free-of-charge to the patients by AMGEN, as part of a multi-institutional clinical trial on the use of G-CSF to treat neutropenia.

The authors thank Suzan Tibor for typing this manuscript.

References

1. Weetman RM, Boxer LA. Childhood Neutropenia. *Pediatr Clin North Am* 1980;27:(2)361-75.
2. Groopman JE, Molina JM, Scadden DT. Hematopoietic Growth Factors: Biology and Clinical Applications. *N Engl J Med* 1989;321:(21)1449-59.
3. Gabrilove JL, Jakubowski A. Granulocyte Colony-stimulating factor: Preclinical and Clinical Studies. *Hematol Oncol Clin North Am* 1989;3:(3)427-40.
4. Weisbart RH, Golde DW. Physiology of granulocyte and macrophage colony-stimulating factors in host defense. *Hematol/Oncol Clin North Am* 1989;3:(3):401-9.
5. Moore MAS, Warren DJ. Synergy of interleukin 1 and granulocyte colony-stimulating factor: In vivo stimulation of stem-cell recovery and hematopoietic regeneration following 5-fluorouracil treatment of mice. *Proc Natl Acad Sci USA* 1987;84:7134-38.
6. Cohen AM, Zsebo KM, Inoue H, Hines D, Boone TC, Chazin VR, Tsai L, Ritch T, Souza LM. In vivo stimulation of granulopoiesis by recombinant human granulocyte colony-stimulating factor. *Proc Natl Acad Sci USA* 1987;84:2484-8.
7. Welte K, Bonilla MA, Gillio AP, Boone TC, Potter GK, Gabrilove JL, Moore MAS, O'Reilly RJ, Souza LM. Recombinant Human granulocyte colony-stimulating factor: effects on hematopoiesis in normal and cyclophosphamide-treated primates. *J Exp Med* 1987;165:941-8.

8. Hammond IV, WP, Price TH, Souza LM, Dale DC. Treatment of cyclic neutropenia with granulocyte colony-stimulating factor. *N Engl J Med* 1989;320:(20)1306-11.

9. Bonilla MA, Gillio AP, Ruggeiro M, Kernan NA, Brochstein JA, Abboud M, Fumagalli L, Vincent M, Gabrilove JL, Welte K, Souza LM, O'Reilly RJ. Effects of recombinant human granulocyte colony-stimulating factor on neutropenia in patients with congenital agranulocytosis. *N Engl J Med* 1989;320:(24)1574-80.

10. Welte K, Zeidler C, Reiter A, Muller W, Odenwald E, Souza L, Riehm H. Differential effects of granulocyte-macrophage colony-stimulating factor and granulocyte colony-stimulating factor in children with severe congenital neutropenia. *Blood* 1990;75:(5)1056-63.

11. Price TH, Dale DC. The selective neutropenias. *Clin Hematol* 1978;7:501-21.

12. Rapoport JM, Parkman R, Newburger P, Camitta BM, Chusid MJ. Correction of infantile agranulocytosis (Kostmann's Syndrome) by allogeneic bone marrow transplantation. *Am J Med* 1980;68:605-9.

13. Dale DC, Guerry IV, D, Wewerka JR, Bull JM, Chusid MJ. Chronic neutropenia. *Medicine* 1979;58:(2)128-44.

14. Lakos A, Timar L. Treatment of Idiopathic chronic neutropenia with high-dose intravenous immunoglobulin. *Am J Dis Child* 1987;141:12-13.

15. Komiya A, Ishiguro A, Kubo T, Matsuoka T, Yasukochi S, Yasui K, Yanagisawa M, Yamada S, Yamazaki M, Akabane T. Increases in neutrophil counts by purified human urinary colony-stimulating factor in chronic neutropenia of childhood. *Blood* 1988;71:41-45.

16. Lalezari P, Khorshidi M, Petrosova M. Autoimmune neutropenia of infancy. *J Pediatr* 1986;109:(5)764-9.

17. Bussel J, Lalezari P, Hilgartner M, Partin J, Fikrig S, O'Malley J, Barandun S. Reversal of neutropenia with intravenous gammaglobulin in autoimmune neutropenia of infancy. *Blood* 1983;62:(2)398-400.

18. Ventura A, Florean P, Pascone R, Perini R, Pocecco M, Lepore L. Intravenous immunoglobulin in immune neutropenia. *Helv Paediat Acta* 1986;41:495-500.

19. Hilgartner MW, Bussel J. Use of intravenous gamma globulin for the treatment of autoimmune neutropenia of childhood and autoimmune hemolytic anemia. *Am J Med* 1987;83:25-9.

20. Morstyn G, Campbell L, Lieschke G, Layton JE, Maher D, O'Connor M, Green M, Sheridan W, Vincent M, Alton K, Souza L, McGrath K, Fox RM. Treatment of chemotherapy-induced neutropenia by subcutaneously administered granulocyte colony-stimulating factor with optimization of dose and duration of therapy. *J Clin Oncol* 1989;7:(10)1554-62.

21. Ohno R, Tomonaga M, Kobayashi T, Kanamaru A, Shirakawa S, Masaoka T, Omine M, Oh H, Nomura T, Sakai Y et al. Effect of granulocyte colony-stimulating factor after intensive induction therapy in relapsed or refractory acute leukemia. *N Engl J Med* 1990; 323 (13):871-7.

22. Bronchud MH, Scarffe JH, Thatcher N, Crowther D, Souza LM, Alton NK, Testa NG, Dexter TM. Phase I/II study of recombinant human granulocyte colony-stimulating factor in patients receiving intensive chemotherapy for small cell lung cancer. *Br J Cancer* 1988;58:809-813.

23. Cabrilove JL, Jakubowski A, Scher H, Sternberg C, Wong G, Grous J, Yagoda A, Fain K, Moore MAS, Clarkson B, Oettgen HF, Alton K, Welte K, Souza L. Effect of granulocyte colony-stimulating factor on neutropenia and associated morbidity due to chemotherapy for transitional-cell carcinoma of the urothelium. *N Engl J Med* 1988;318:(22)1444-22.

24. Sheridan WP, Morstyn G, Wolf M, Dodds A, Lusk J, Maher D, Layton JE, Green MD, Souza L, Fox RM. Granulocyte colony-stimulating factor and neutrophil recovery after high-dose chemotherapy and autologous bone marrow transplantation. *Lancet* 1989;2:891-95.

25. Gabrilove JL. Introduction and overview of hematopoietic growth factors. *Semin Hematol* 1989; 26(2):1-4.

26. Moore MAS. Hematopoietic growth factors in Cancer. *Cancer* 1990;65:836-44.

27. Begley CG, Metcalf D, Nicola NA. Primary Human Myeloid Leukemia Cells: Comparative Responsiveness to Proliferative Stimulation by GM-CSF or G-CSF and Membrane Expression of CSF Receptors. *Leukemia* 1987;1(1):1-8.

28. Nara N, Murohashi I, Suzuki T, Yamashita Y, Maruyama Y, Aoki N, Tanikawa J, Onozawa Y. Effects of Recombinant human granulocyte colony-stimulating factor (G-CSF) on blast progenitors from acute myeloblastic leukaemia patients. *Br J Cancer* 1987;56:49-51.

29. Lista P, Brizzi MF, Avanzi G, Veglia F, Resegotti L, Pegoraro L. Induction of proliferation of acute myeloblastic leukemia (AML) cells with hemopoietic growth factors. *Leuk Res* 1988; 12(5):441-7.

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Current Perspectives on Papillary Carcinoma of the Thyroid Gland

Michelle K. Chiu, BS, Richard M. Sherry, MD, John P. Wei, MD

THYROID CARCINOMAS are the most common type of endocrine malignancies.¹ Initial symptoms may be nonspecific. Typically, patients present with a recently discovered nodule in the neck or one of long standing. Thyroid nodules are very common, with some estimates as high as 5% of the population.² Malignant nodules have an incidence of 40 per one million patients.³ Although this represents a low incidence, morbidity from thyroid cancer is the most devastating of all the endocrine organs, excluding ovarian tumors. With proper identification, treatment, and surveillance, a malignancy of the thyroid discovered early can have a high success rate of treatment.

The most common form of thyroid cancer is papillary carcinoma, accounting for as high as 80% of all thyroid malignancies.⁴ Paradoxically, the mortality rate from papillary carcinoma is the lowest of all thyroid cancers.⁵ The peak incidence is in the fourth and fifth decade, with a female:male ratio of 2.6:1.^{6,7} Clinical studies have shown that increasing age is associated with an increased risk for papillary carcinoma.⁴

The epidemiology of papillary carcinoma implicates prior irradiation to the head and neck areas for treatment of other disorders, with a linear dose exposure-incidence ratio.⁸ Risk for radiation-induced papillary carcinoma increases inversely proportionally to the age at

‘Papillary carcinoma is the most common carcinoma of the thyroid gland, but it is also the one with the best prognosis.’

which radiation exposure occurred.⁹ Although papillary carcinomas may be seen within families, there is no established genetic linkage for this disease. Excess dietary iodine may be a predisposing factor. Increased TSH levels have also been suggested to be a causative factor.⁸ Molecular analysis indicates that the ras oncogene may have an important role in causation of this tumor.^{10,11}

Diagnostic Methods

The diagnosis of papillary carcinoma begins with a thorough history and physical examination. Prior radiation exposure and familial cancer profile are important risk factors. The physical characteristics of the thyroid gland, the number of nodules, and the presence of palpable cervical lymph nodes aid in estimating the probability of thyroid

malignancy. Serologic laboratory tests, other than routine thyroid functions, are not useful in diagnosis of thyroid cancers.

Exogenous thyroid hormone in doses sufficient to suppress endogenous TSH may be used as a diagnostic maneuver and administered for a course of several months in an attempt to reduce the size of a thyroid nodule. If the thyroid abnormality is TSH-dependent, regression with this therapy decreases the likelihood of malignancy. Many clinicians use this as a means for distinguishing benign from malignant nodules.

Current radiologic methods for assessing the thyroid gland use either technetium-99m or iodine-123 to measure the functional capabilities of the thyroid nodule. The absence of radionuclide concentration, i.e., a “cold nodule,” is associated with a malignancy rate of 24%, while only 5% of functioning nodules are malignant.¹ Ultrasonography is useful for quantification of tumor size and aids in distinguishing cystic from solid lesions. The risk of cancer in a cystic lesion, approximately 5%, is less than that for a solid lesion.^{6,8}

Fine needle aspiration cytology is useful for determining the presence of malignancy, with 90% reliability. Important criteria for cytologic assessment of papillary carcinoma include the presence of true papillary formation, ground-glass nuclei, and psammoma bod-

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This article was written at the request of the American Cancer Society, Georgia Division.

ies. The presence of psammoma bodies may be a prognostic indicator of nodal metastases, as 53% of nodules with psammoma bodies will have lymphatic involvement.⁶

Treatment

Surgery for papillary carcinoma is dependent upon the clinical extent of disease, the histologic criteria of the tumor, and the experience of the surgeon.^{5,12} Consideration of the overall excellent prognosis for papillary carcinoma and the morbidity of recurrent laryngeal nerve injury and hypoparathyroidism may determine the advisability of total thyroidectomy or near-total thyroidectomy versus a subtotal thyroidectomy or simple thyroid lobectomy.^{3,5,13}

Papillary carcinoma has a high incidence of multi-centricity, supporting total thyroidectomy as the best operation.⁴ Large series have shown reduced tumor recurrence rates in those patients who have undergone total thyroidectomy.¹² One retrospective study analyzed the theoretical advantage of total thyroidectomy and found that only 5% of the patients with tumor recurrence would have benefitted from a more extensive operation than the initial procedure performed.¹ Because surgical resection of cervical lymph node metastases may be curative, aggressive surgical resection in the presence of extensive disease is indicated.⁹

Iodine-131 is a useful adjunct after surgical treatment for papillary carcinoma. With small doses, it can be used to identify tumor recurrence or metastasis in a surveillance program, but with higher therapeutic doses, it is used for ablation of the remaining thyroid tissue after near-total or subtotal thyroidectomy or for unresected microscopic foci of tumor.^{4,9} Mild toxicities may include nausea, vomiting, and sialoadenitis, with occasional bone marrow suppres-

sion.⁴ Radiation-induced myeloproliferative disorders after long latency periods are rare.

Initiation of exogenous thyroid hormone after surgery and radioactive iodine ablation is important.

External beam radiation therapy may be indicated as an adjuvant in patients who have locally invasive aggressive papillary carcinomas. Palliative treatment for bony metastases may also require this therapeutic modality. In the presence of recurrent tumor unresponsive to I-131, secondary to poor uptake, external beam radiation treatment is necessary.

Initiation of exogenous thyroid hormone after surgery and radioactive iodine ablation is important. Because triiodothyroxine (T3) has a shorter half life than thyroxine (T4), the time required to reach equilibrium euthyroid state is less for replacement with T3.³ Thyroid hormone supplementation should be at doses sufficient to suppress serum TSH and thyroglobulin levels.

Prognosis

The prognosis of papillary carcinoma is dependent upon several clinical and pathologic criteria. The Mayo Clinic uses the AGES system, scoring for the patient's age, tumor grade, extent of tumor, and size of tumor.¹³ A modification of this system for predicting the recurrence rate and cure rate, AMES uses the criteria of age, metastasis to distant sites, extent of primary tumor, and size greater than 5 cm.¹⁴ A more recent proposed predictive system, RAPE, evaluates tumor uptake of radioactive iodine, adenylyl cyclase response to TSH, ploidy content of

the tumor, presence of epithelial growth factor receptors, and the extent of treatment.³

Patients with papillary carcinoma may be divided into a low-risk category and a high-risk category for recurrence and mortality from the disease. The AJCC system (TNM) for papillary carcinoma recognizes age greater than 45, extrathyroid invasion by direct extension, distant metastasis, and tumor size as staging criteria.¹⁵ The WHO distinguishes between the variant histologies of papillary carcinoma which have either a benign or more malignant course. Accepted designations for those variants of papillary carcinoma with good prognoses include micropapillary (< 1 cm), encapsulated, solid, and follicular; those with poor prognoses include tall-cell, columnar, and diffuse sclerosing.¹⁶ The presence of Hashimoto's thyroiditis is associated with a better prognosis.^{5,7,17}

No significant impact of lymph node involvement on tumor recurrence rate has been identified.^{5,14} Local recurrence rates have been estimated to be between 5.8% and 16%.^{5,7,13} Nodal metastases frequently involve the peri-tracheal lymph nodes.² Usual sites of distant metastases are 76% lung, 24% mediastinum, 23% bone, and 15% brain.¹³

Future prospects for treatment of papillary carcinoma are promising. Studies using increased doses of iodine-131 or additional agents, such as lithium, to enhance the radiation effect are underway. Bone marrow toxicity may be the limiting result of radioactive therapy in papillary carcinoma. Progress in autologous bone marrow transplantation may allow the effects of radiation on bone marrow to be bypassed. Concomitant use of adriamycin to enhance radioactive tumoricidal impact has not shown an increase in bone marrow toxicity.⁴

Astatine isotope 211 is a member of the same family as iodine. This isotope is a high-energy alpha particle emitter and is as effective as I-131 in concentrating within thyroid tissue. Serious side effects include systemic lymphopenia, damage to ovarian follicles, and loss of testicular germ cells.⁴ More research will be needed before this could be of clinical utility.

Immunologic research has been done with monoclonal antibodies conjugated with radio-isotopes. Because the association of autoimmune thyroiditis and papillary carcinoma has a better prognosis, clinical studies to induce an immunologic response have been attempted, but with minimal responses thus far.⁴

Prospects for therapeutic developments may evolve at the molecular level. The ras oncogene requires farnesylation for activation to bind to GTP.^{10,11} Agents designed for enzyme inhibition of farnesylation or for blocking of GTP binding may be the logical extension of this research.

Summary

Papillary carcinoma is the most common of the carcinomas of the thyroid gland, but it is also the one with the best prognosis. At the pres-

ent, diagnosis is best done by fine needle aspiration, and treatment by surgical resection. With recent advances in molecular and cellular biology, diagnosis and therapy in the future may depend on micro-molecular technologies. The prognosis is promising for increased success in the treatment of papillary carcinoma.

Prospects for therapeutic developments may evolve at the molecular level.

References

1. Rossi RL, Nieroda C, Cady B, Wool MS. Malignancies of the thyroid gland: the Lahey Clinic experience. *Surg Clin North Am* 1985;65:211-230.
2. Block BL, Spiegel JC, Chami RG. The treatment of papillary and follicular carcinoma of the thyroid. *Otolaryngol Clin North Am* 1990;23:403-411.
3. Clark OH, Duh QY. Thyroid cancer. *Med Clin North Am* 1991;75:211-234.
4. Robbins J, Merino MJ, Boice JD Jr, Ron E, Ain KB, Alexander HR, Norton JA, Reynolds J. Thyroid cancer: a lethal endocrine neoplasm. *Ann Int Med* 1991;115:133-147.
5. Brooks JR, Starnes HF, Brooks DC, Pelkey JN. Surgical therapy for thyroid carcinoma: a review of 1249 solitary thyroid nodules. *Surgery* 1988;104:940-946.
6. Carcangiu ML, Zampi G, Pupi A, Castagnoli A, Rosai J. Papillary carcinoma of the thyroid: a clinicopathologic study of 241 cases treated at the

University of Florence, Italy. *Cancer* 1985;55:805-828.

7. McConahey WM, Hay ID, Woolner LB, van Heerden JA, Taylor WF. Papillary thyroid cancer treated at the Mayo Clinic, 1946 through 1970: initial manifestations, pathologic findings, therapy, and outcome. *Mayo Clin Proc* 1986;61:978-996.

8. Norton JA, Doppman JL, Jensen RT. Cancer of the endocrine system. In: DeVita VT, Hellman S, Rosenberg SA, editors. *Cancer: principles and practice of oncology*. 3rd edition. Philadelphia: JB Lippincott, 1989:1269-1344.

9. Simpson WJ. Radioiodine and radiotherapy in the management of thyroid cancers. *Otolaryngol Clin North Am* 1990;23:509-521.

10. Baxter JD. Advances in molecular biology: potential impact on diagnosis and treatment of disorders of the thyroid. *Med Clin North Am* 1991;75:41-59.

11. Karga H, Lee JK, Vickery AL Jr, Thor A, Gaz RD, Jameson JL. Ras oncogene mutations in benign and malignant thyroid neoplasms. *J Clin Endocrinol Metab* 1991;73:832-836.

12. DeGroot LJ, Kaplan EL, McCormick M, Straus FH. Natural history, treatment, and course of papillary carcinoma. *J Clin Endocrinol Metab* 1990;71:414-424.

13. Grant CS, Hay ID, Gough IR, Bergstralh EJ, Goellner JR, McConahey WM. Local recurrence in papillary thyroid carcinoma: is extent of surgical resection important? *Surgery* 1988;104:954-962.

14. Cady B, Rossi R. An expanded view of risk-group definition in differentiated thyroid carcinoma. *Surgery* 1988;104:947-953.

15. Beahrs OH, Henson DE, Hutter RVP, Myers MH, editors. *Manual for Staging Cancer*. 3rd edition. Philadelphia: JB Lippincott, 1988:57-59.

16. Hedinger C, Williams ED, Sobin LH. Histological typing of thyroid tumours. 2nd edition. No. 11 in: *International Histological Classification of Tumours*, World Health Organization. Berlin: Springer-Verlag, 1988.

17. Hedinger C, Williams ED, Sobin LH. The WHO histological classification of thyroid tumors: a commentary on the second edition. *Cancer* 1989;63:908-911.

18. Hamby LS, McGrath PC, Schwartz RW, Sloan DA, Simpson WG, Kenady DE. Management of local recurrence in well-differentiated thyroid carcinoma. *J Surg Research* 1992;52:113-117.

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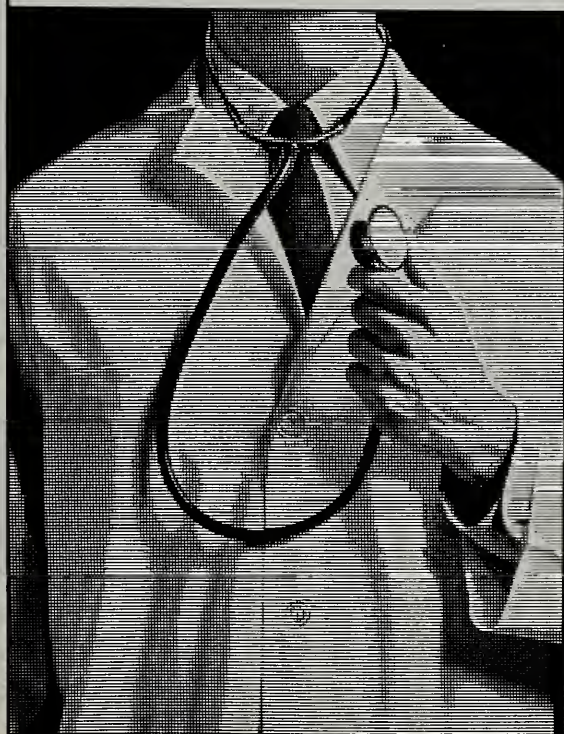
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ADVERTISING INDEX

American Medical Association	447
AuraTech, Inc	450
The Chattahoochee Bank	449
Classified Advertisement	445
CompHealth	405
Health Quip, Inc.	405
Knoll Pharmaceuticals	446 A-B
Lilly, Eli & Company	428
MAG Mutual Insurance Company	420
Palisades Pharmaceuticals, Inc	404
PaineWebber	404
University of Virginia School of Medicine	406
U.S. Air Force	406
U.S. Army Active	445
U.S. Army Reserve	432
Walton Rehabilitation Hospital	441

MANUSCRIPT INFORMATION

MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely in this *Journal*. Manuscripts should be typewritten, double-spaced, and the original and one copy should be submitted. Receipt of manuscripts will be acknowledged.

STYLE — In general, articles can be 8-10 pages in length. For exceptional circumstances, contact the Managing Editor. Footnotes, bibliographies, and legends should be typed on separate sheets, double-spaced. Bibliographies should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages.

Sorter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

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MEDICAL EDITING SERVICES — If in the opinion of the *Journal* Editorial Board, material submitted for publication could be improved by a Medical Editing Service, the Editor will contact the author for his or her approval. Association members needing assistance in preparation of material for publications may also use this service. A reasonable charge is made for this service and the cost of this will be borne by the author.

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For Your Benefit

AMA Pursues Approval for Physician Self-Regulation

Challenging nearly 20 years of legal precedents, the American Medical Association is calling for a series of actions that, without fear of anti-trust laws, would bolster physicians' power to collectively negotiate fees with third-party payers. The AMA specified that:

- quality of care concerns be the primary factor when judging professional standards,
- guidelines defining deceptive physician advertising be approved, and
- litigation protection for hospital medical staffs that discipline physicians be afforded.

The AMA also asked more latitude under anti-trust laws to negotiate policies that affect patients. These changes include developing:

- physician-established policies on

insurance coverage, credentialing and reimbursement by managed care plans and other payers;

- means for physicians to negotiate collectively with dominant payers, and
- means by which physicians can jointly market their services without combining their practices.

The AMA is also coordinating new initiatives to synchronize the profession's large self-regulatory network to better implement professional standards.

To this end, the AMA petitioned the Federal Trade Commission for an advisory opinion to relax anti-trust restrictions to allow professional associations authority to conduct peer review of fees and to discipline those physicians who fee gouge. The FTC is required to answer the AMA's petition.

AMA Obtains [More] Grace for You

The AMA has obtained a two-month grace period for transition to the new Medicare claim form [Form 1500, available through the AMA.] Effective May 1, physicians should submit claims

on the new form. But, carriers will continue to make payments for claims submitted on "old" claims forms through July 1, 1992.

A Day for Crying

The sea sobs into the sea-walled stones
 And drips its tears on the pier's patient piling.
 The day has tears, has blood, has useless dying,
 As the wind sighs and clears its throat from crying
 And the high-ribbed sky bares its sun-bleached
 bones.

Seagulls perch with wide-spread wings on the
 back
 Of the dropping wind as the marsh grass parts nor
 stays
 Its footfall passage through. Constant are ways
 Of the shamefaced sun tethered to her days,
 And devious the moon stretched on the torture
 rack.

Dusts of stars from high-riding suns obscure
 Distant purposes man can only guess.
 He seeks assurance, needing hopefulness,
 And the winds and waves all mourn their wet-eyed
 "yes"
 That heavens are planned, that heavens are sweet
 and pure!

Beyond Forgetting

When the heart is far beyond forgetting,
 The burnished lamp of passion flaming brightly,
 There is seldom time for brief regretting,
 For the burning wick does not turn lightly.
 Deep inside the heart blue flames flicker,
 Flushing face and flashing through the eyes,
 Filling one to overflowing quicker
 Than emotions coming with surprise.

Love is not some magic incantation,
 Nor a brew of moon and perfumed night;
 Coming not with blazing revelation,
 Burning heat and blinding with its light.
 Love is sharing each new found emotion,
 Giving hope and showing gentleness,
 Security on this or any ocean—
 Can any shore give more or offer less!

Poems by John R. Lewis, MD, a plastic surgeon in Atlanta and Georgia's Poet Laureate

*Georgia Medical Care Foundation:
Medicaid Precertification Announcement*

AT THE RECOMMENDATION of specialty societies and a number of concerned physicians, septoplasty, arthroscopy, and cataract procedures will be placed on the DMA-Medicaid prior approval elective procedure list effective October 1, 1992. Prior approval will utilize written documentation for planned procedures and eliminate the inconvenience of time consuming precertification calls to the Georgia Medical Care Foundation (GMCF). Prior approval also will permit laboratory data, x-rays and/or photographs to be included at

the time of request, better documenting the indications for surgery.

Requests for prior approval should be submitted to the GMCF Medicaid Preadmission Department using the GMCF Precertification form. Approved review decisions will be completed and returned within one week. If initially the case cannot be approved because peer review by a physician specialist is required, the decision will be reported within ten days of the receipt.

As always, emergency procedures will not be subject to prior

approval but should be called into GMCF as soon as possible but no later than *two working days from the date of the surgery*. As with all procedures, medical justification will be required before surgery can be approved for payment by DMA.

The Department of Medical Assistance and GMCF are pleased to make this modification and anticipate that reported problems concerning wasted telephone communication will be eliminated by this new approach. We appreciate your patience and continued support of the Medicaid program.

Hospital-Physician Relationships

John A. Ferguson, Jr.

Editor's Note: The following comments appeared in a recent publication of the Georgia Hospital Association (GHA). John Ferguson is the current Chairman of the Board of Trustees of the GHA. I have known him for several years and found him to be an intelligent and reasonable individual who makes sense when he talks about the need for hospital administration and medical staff to work toward an even more cooperative relationship. As long as hospital administration, physicians, and third party payor groups view each other as adversaries, it will be difficult to fashion a harmonious and mutually satisfying health care system. John Ferguson is a voice from the arena of hospital administration to whom we need to listen.

JUST AS TODAY'S health care delivery system is undergoing changes, it is equally necessary that hospitals and physicians re-evaluate the way they interact. We must search for and find ways to resolve issues related to the provision of

health care in our individual communities. And the answers we find collectively may be of a non-traditional nature.

For years, the lines defining the separate role of hospital management/trustees as opposed to physicians were quite clear. We were entrusted with the business aspects of health care, and our physicians cared for the patients. (The often arms' length relationship promoted little communication, but the end results seemed appropriate for that point in time.

It is time, now, for that relationship to change, evolve and converge with the future needs of health care. Physicians, hospital management, and hospital governing bodies must work hand-in-hand to assure the delivery of quality, resource-effective health care. Hospi-

Mr. Ferguson is Chairman of the Board of Trustees of the Georgia Hospital Association. These remarks are reprinted with permission from *GEORGIA HOSPITALS TODAY*.

tals and physicians must speak frankly and openly with each other about the allocation of resources and how, together, we can provide the most effective means for the populace to secure quality affordable health care.

For affordable health care to be a reality, there must come efficiency of delivery. And with quality as an absolute, then physicians and hospitals must learn new and innovative ways to achieve that efficiency, still providing choice and access. The challenge is before us and must be met. Together, we must work and live within limits of a reformed system that will provide choice and secure access while guaranteeing demonstrated quality and affordability.

We must shoulder the leadership role individually and collectively through joint efforts with organizations such as GHA and MAG — and we must work towards an integrated approach to health care delivery like never before.

Improved Communication with Aetna Reaps Benefits for Georgia Physicians

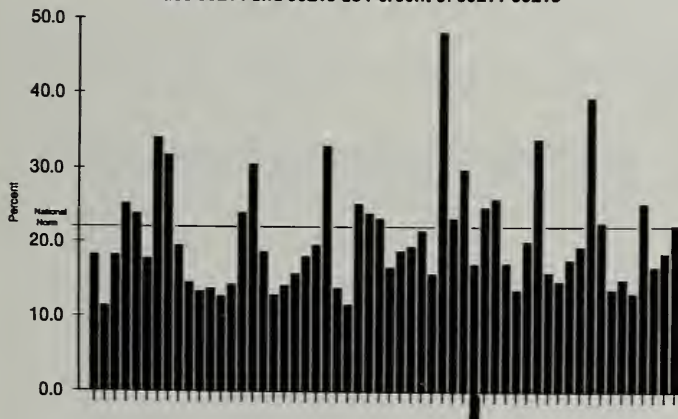
GOOD NEWS on the Medicare front. As the result of a joint effort by MAG and Aetna, and in keeping with HCFA's direction towards education, the postpayment process has been dramatically revised. Effective August 1, 1992, on all new and unresolved

existing cases, the overpayment process will be calculated by using actual overpayments taken from a review of 1 month of claims. During the initial review process, the overpayment will not be projected but will be based only on the actual overpayment. How-

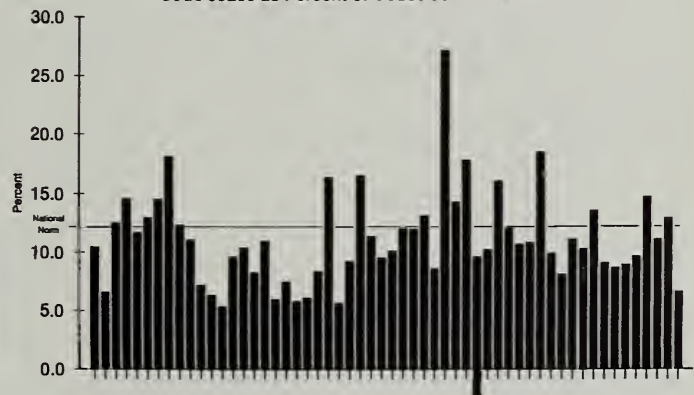
ever, the option to use the consent settlement and statistical sampling processes is still available if the aberrancies continue after the initial postpayment review and a reasonable educational period.

This is a significant change and one

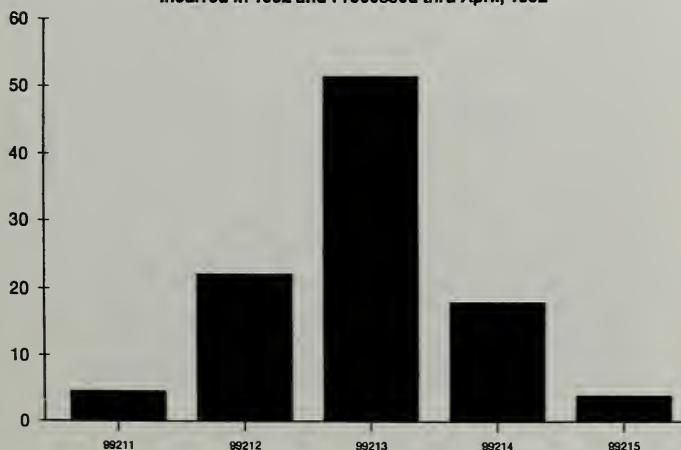
Office Visits - Established Patient
Percent Distribution by Carrier
Codes 99214 and 99215 as Percent of 99211-99215



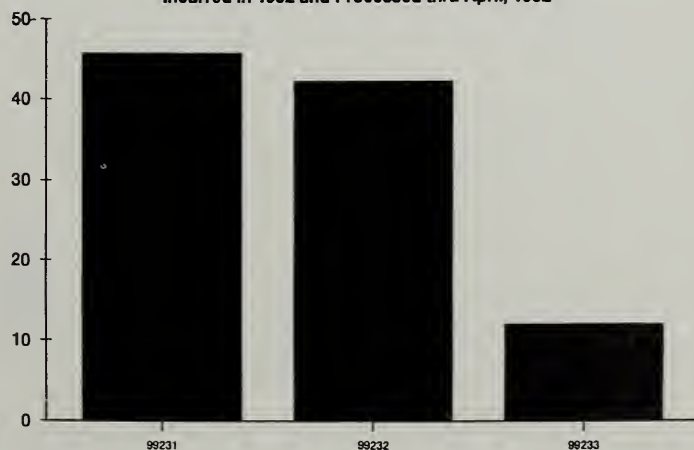
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Percent Distribution by Carrier
Code 99233 as Percent of Codes 99231 - 99233



Percent Distribution - Office Visits: Established
Codes 99211 thru 99215
Incurred in 1992 and Processed thru April, 1992



Percent Distribution - Subsequent Hospital Visits
Codes 99231 thru 99233
Incurred in 1992 and Processed thru April, 1992



that is a direct result of improved relations, open communications, and a willingness to work together to solve common situations that exist between the physician community and Aetna.

Two other noteworthy developments include the announcement of the nationwide study results of the new physician visit codes—for which Georgia is either at or below the national norms in the areas measured, and the formation of a new expanded version of our existing Advisory Committee.

The physician evaluation and management visit code study, reflecting

patterns for the first quarter of 1992, shows Georgia is not aberrant in the use of the higher level office visit and hospital visit codes, as stated by Aetna in the July 15 Medicare Advisory Committee meeting. This means that we are not using the higher code levels at a rate greater than the national level. Preliminary findings of this early data showed this to be true for most visit codes and for most specialties. This is a change from previous findings released by HCFA that indicated Georgia physicians were higher than the national norms in their use of the comprehensive level of service. Additional data comparisons by state, specialty,

and service will be made available in the future.

Secondly, the new Medicare Provider Advisory Committee required by HCFA will meet quarterly, beginning in October, 1991, and will include at least 29 physician specialty organizations. These will include chiropractors, podiatrists, optometrists, as well as beneficiaries, HCFA representatives, and congressmen. Aetna has assured us that this will not supplant MAG's advisory committee which will continue to meet apart from the new committee.

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MAG SPONSORS MEDICAL-LEGAL SEMINAR

MAG's first Medical-Legal Seminar, "The Law and the Physician," was a resounding success—just ask the more than 100 physicians who

came to Amelia Island July 9-12 for the conference. The conference drew physicians from Georgia and Florida, and MAG is being contacted by other states to "learn how we did it so well."



Robert Novak, (left) CNN political commentator and co-host of "Evans and Novak" interview TV program and of CNN's "Capitol Gang," was a highlighted speaker. His talk was both entertaining and provocative regarding the current political climate in this country. Mr. Novak is shown here with MAG's Executive Director, Paul Shanor, and one of the Seminar attendees.

An outstanding faculty earned the seminar high ratings from those attending. Robert Novak, CNN political commentator and co-host of "Evans and Novak" interview TV program and of CNN's "Capitol



Howard Lang, MD, (left) Immediate Past President of the California Medical Association and Immediate Past Chairman of the AMA's HMS Section; Atlanta attorney Richard Vincent, of Vincent, Chorey, Taylor & Feil; and Gwynne Brunt, MD, Chairman of MAG's HMS Section and an Atlanta radiologist, served on a panel which discussed the necessity for and importance of physician-friendly medical staff bylaws.

Gang," gave us the scoop on the upcoming national maneuvers leading us to the November elections.

Among the speakers who made the program so outstanding were Howard Lang, M.D., the immediate Past President of the California Medical Society and immediate Past Chairman of the AMA's Hospital Medical Staff Section; James M. Spears, General Counsel for the Federal Trade Commission; and Edward B. Hirshfeld, from the AMA's office of the General Counsel. Their remarks were so well received by the Seminar attendees that we are publishing them in this issue so they can reach a broader audience.

Someone said we put together all the top health-care attorneys in the country. They include Elizabeth A.



More than 100 physicians from throughout Georgia and parts of Florida attended the Medical-Legal Seminar in Amelia Island, Florida, last July. Topics presented ranged from CLIA to OSHA's new requirements and professional self-regulation for private physicians to an emphasis on medical staff bylaws.

Snelson, a health-care attorney from Minneapolis, MN (whose remarks are also included in this issue); Donald Wilcox, General Counsel of the Texas Medical Association; Brent Mulgrew, Executive Director of the Ohio Medical Association; John Thrasher, General Counsel of the Florida Medical Association; Jack Bierig, a health care attorney from Chicago, IL, each lead sessions involving regulations and law. MAG's own General Counsel Richard Greene and Associate General Counsel Cynthia Haney presented programs on Georgia law and advance directives, respectively.

Perry A. Lambird, M.D., Chairman of the AMA's Council on Medical Services and a member of the Commission on Office Laboratory Accreditation, spoke on the Clinical Laboratory Improvement Act. MAG Mutual's team of Tom Gose, Marilyn Allen, and Robert Constantine also played an important part of the program, speaking on alternative dispute resolutions. Richard Vincent, of Atlanta, a leading attorney in medical staff bylaws gave two sessions. MAG members Gwynne Brunt, M.D., of Atlanta, and Bill Jones, M.D., of Gainesville, also participated on panels on bylaws.

Topics ranged from the CLIA to OSHA's new requirements and professional self-regulation for private physicians to an emphasis on medical staff by-laws for those who are on medical staffs or are principally hospital-based.

Copies of the Seminar materials are available through MAG for \$60 each (404-876-7535, ask for Theresa VanCura) — but next year be sure to attend. This is a "don't miss" meeting.

MAG PRESIDENT HONORED

How do you say thanks to a great man and a good friend? The Georgia General Assembly found a way



President Dr. Tom Anderson, honored by the Georgia General Assembly.

to say exactly that to MAG President Dr. Tom Anderson. Sen. Mike Egan of Atlanta presented a July 7 Resolution commending Dr. Anderson on becoming president of the Association and for his contribution to the health and well-being of Georgians. Sen. Egan presented the Resolution during the July Medical Staff Meeting at Crawford W. Long Hospital. Congratulations for this well-deserved honor, Dr. Anderson

INTERSPECIALTY COUNCIL TO MEET RE SELF REFERRAL

There will be a meeting of MAG's Interspecialty Council on September 9th at MAG Headquarters in Atlanta. The purpose of the meeting is to respond to the MAG House of Delegates' action requesting MAG to formulate a position on the issue of "self-referral," that is, referral by a physician to a facility in which he or she has a financial interest. The results of the Interspecialty Council's deliberations will be presented at the September Board of Directors meeting (September 19th, on Sea

Island) as the next step in framing MAG's legislative position for the 1993 Georgia General Assembly. Please confer with your specialty society leadership and liaison to the Interspecialty Council to make your concerns known.

AHA PRESIDENT TO CONGRESS; PRESENT STRUCTURE NEED "OVERHAUL"

The president of the American Hospital Association presented a plan for "reinventing" the American health delivery system before a congressional committee recently. The plan could end the "medical arms race" by giving health care providers a reason to hold down costs, said Richard J. Davidson. "It is time to junk the policies on the past, overhaul the health delivery structure, and encourage different behaviors by consumers, providers, and payers," said Mr. Davidson. "Only in that way will we achieve access for all to needed services at a cost this country, employers, and citizens can afford."

Speaking before the U.S. Senate Finance Committee, Davidson said the keystone to a reformed health care system should be "community care networks," linking together hospitals, physicians, and other health care providers. A network would provide all necessary health care services to enrolled patients for a set fee per year. Each patient would have a single entry point for all services, rather than having to call many providers to get care.

Since health care providers in a network would be tied together financially, they would cooperate to reduce costs rather than compete to duplicate services, Davidson said. "Once hospitals, physicians, and others are linked within a network, their incentive would be to avoid future duplication of technology, services, and facilities. Community care networks would move

the concept of competition away from the medical arms race to a level based on service to patients."

Davidson said the federal government could help community care networks form quickly by directing Medicare and Medicaid patients to use networks and by offering tax incentives for network use. Antitrust laws also would need to be changed to allow stepped up collaboration between health care providers, he said.

In order to ensure universal access to basic health care benefits, the association favors an employment-based approach to health care financing in which employers would offer health insurance to all employees and their families, or pay premiums necessary to enroll their workers in a single public insurance plan. Everyone not employed or not having an individual insurance policy would get their health insurance through the public plan.

(Reprinted from GEORGIA HOSPITALS TODAY.)

GEORGIA CME REQUIREMENTS

Effective January 1, 1992, Georgia physicians licensed to practice medicine must complete Composite State Board of Medical Examiners approved continuing education of not less than 40 hours biennially.

The Board originally accepted only the AMA (American Medical Association) Category 1 and AOA (American Osteopathic Association) Category 1 credits as meeting its requirement for Board approval.

The Board has now accepted the AAFP (American Academy of Family Physicians) Prescribed credits, the ACOG (American College of Obstetricians and Gynecologists) Cognates Category 1, and the ACEP (American College of Emergency Physicians) Category 1 credits as also meeting its requirement for Board approval.

COLA STANDARDS

To be accredited by the Commission on Office Laboratory Accreditation (COLA), physician office labs must meet certain standards, which are consistent with the requirements of the Clinical Laboratory Improvement Amendments of 1988.

First, physician office laboratories must have sufficient space, equipment, facilities and supplies to perform the required volume of work with accuracy, precision, efficiency and safety. Labs must provide prompt, reliable reporting of results.

Second, physicians who direct laboratories are responsible for insuring that there are sufficient personnel with documented training to conduct the work of their laboratories.

Third, each laboratory must have a quality assurance program designed to assure the reliability and medical usefulness of the laboratory data. The quality assurance program should contain the following components:

- Selection of test methods appropriate to the needs of those served by the laboratory and within the technical capabilities of the facility.
- A quality control program that monitors the precision of laboratory performance.
- A proficiency testing program.
- An instrument maintenance program.
- A continuing education program for the laboratory staff.
- Reasonable documentation of laboratory functions.

COLA SERVICES

COLA provides physicians with more than an inspection of their office laboratories. Services include the following:

- COLA provides the physician the opportunity to conduct a com-

prehensive self-survey using the same criteria as COLA surveyors.

- Physicians can receive up to 15 hours of Category 2 continuing medical education credit for participating in this self-assessment.
- COLA will evaluate the self-survey and provide the laboratory with a report of deficiencies that can be corrected before the on-site survey.
- COLA's surveyors are trained to assist laboratory staff and offer suggestions, hints and advice to help them improve laboratory performance.
- COLA has an expert staff of medical technologists who offer telephone assistance to COLA clients.
- COLA provides timely information regarding all regulations related to the office laboratory, including Occupational Safety and Health Administration regulations, the Stark amendments and others — not just CLIA.
- COLA provides concise articles on various aspects of office laboratory practice — articles that are easily understood and that provide specific information to solve problems.
- The *COLA Guide to Quality Assurance* provides information to office lab workers in non-technical language and provides a ready reference about quality assurance. The guide is being revised to include information to solve problems.
- COLA's Board of Directors consists of practicing physicians who set policies that are sensitive to the needs of their peers.

More information is available by contacting the Commission on Office Laboratory Accreditation, 8701 Georgia Avenue, Suite 610, Silver Spring, MD 20910; phone, (303) 588-5882; fax, (301) 588-7681.

MARK YOUR 1992 CALENDARS

In a continuing effort to provide

up-to-date information on issues impacting your practice, full-day (9:00 am-4:30 pm) "Better Collection Practices for Your Office" seminars will be jointly presented by MAG and the respective County Medical Societies serving the following locations:

Columbus	Thursday	Oct. 22
Albany	Tuesday	Oct. 27
Macon	Wednesday	Oct. 28
Savannah	Thursday	Oct. 29

Seminar Leader: Executive Consultant Thomas Stenklyft, joined I.C. System, one of the largest debt collection agencies in the nation, 20 years ago. He has authored numerous articles on credit and collection and has done many seminars on the topic throughout the country. Confirmed by recent evaluations, Stenklyft is a dynamic and amusing speaker with a refreshing style. His presentation is filled with down-to-earth ideas and advice.

General Session: Opens with an overview of the collection process, and practice management advice on debt prevention. Then comes a unit on establishing effective collections policy, followed by the impact of current federal law on medical practices, a discussion of issues pertaining to enhanced job satisfaction for the collector, and closes with a review of how to work with collection letter services, collection agencies, credit bureaus, and the courts.

Technical Session: Deals with the specifics of skip tracing, writing collection letters, collecting by telephone and in person, meeting payment objections and avoiding legal problems. It includes a telephone conference call with an attorney who answers specific legal questions.

Registration fees: \$125 for the full day (lunch included); \$65 for a half-day session. While you're marking your calendars, include the following up-coming MAG annual events to be held at the Ritz-

Carlton Buckhead in Atlanta:
Scientific Assembly Nov. 20-22, 1992
Leadership Conference Feb. 26-27, 1993

MAG LEGISLATIVE SEMINAR TEACHES POLITICAL STRATEGY TO DOCTORS

If you weren't among the 175 or so physicians and auxiliaries who attended the 1992 Legislative Seminar, YOU MISSED A GREAT MEETING! This relaxing and informative weekend in August provided an opportunity to hear some of the most knowledgeable speakers around on political and campaign issues, to interact with Georgia's health care law decision-makers, and to indulge in plenty of sunshine and relaxation on the beaches of St. Simon's Island. Call the King & Prince Hotel NOW and make your reservations for August 13th -15th, 1993. (The number is 912-638-3631. Now you have no excuse!) Members of the General Assembly who participated as faculty members include:

Senator Roy Allen (Savannah)
Senator Wayne Garner (Carrollton)
Senator George Hooks (Americus)
Senator-elect Johnny Isakson (Marietta)
Senator Hugh Ragan (Smyrna)
Senator Pete Robinson (Columbus)
Senator Charles Walker (Augusta)
Rep. Tommy Chambless (Albany)
Rep. Bob Hanner (Dawson)
Rep. Bart Ladd (Atlanta)
Rep. Jimmy Lord (Sandersville)
Rep. Ann Purcell (Rincon)
Rep. Billy Randall (Macon)
Rep. Henrietta Turnquest (Decatur)

Additional special guests and speakers included:

Congressman Jim Chapman of Texas

Jerald Schenken, M.D., AMA Board of Trustees
Attorney Tom Carlock (argued the collateral source case before Georgia's Supreme Court)
Commissioner Tommy Irvin (Ga. Dept. of Agriculture)
Andy Watry (Exec. Dir., Ga. Composite State Board of Medical Examiners)
Senator Joe Hammill (Brunswick)
Rep.-elect E.C. Tillman (Brunswick)

Special thanks go to organizations helping MAG and AMAG to sponsor this annual meeting: MAG Mutual Insurance Company, and the Pharmaceutical Manufacturers' Association and its member pharmaceutical companies.

We listened to your suggestions from past meetings and split Saturday's audience into two sections, recognizing the varied levels of legislative experience that physicians and their spouses have in the legislative arena. Thus, attendees of past seminars still have a lot they can learn strategically, while novices don't get left behind.

Friday evening and Saturday morning's session focussed on grassroots medical community political action, while Sunday morning was devoted entirely to the top item on MAG's tort reform legislative agenda for 1993 — the restoration of the Collateral Source Rule.

The topics were interesting and timely, the speakers knowledgeable, the food delectable and the beach was . . . well . . . the glorious beach. **Go to your '93 calendar NOW and mark off August 13th-15th so that you can join us next year.** We'll be looking for you.

FRIENDSHIP BRIDGE OFFERS SERVICE OPPORTUNITIES

Friendship Bridge is a non-profit American organization that sends volunteer teams of physicians and

other health care professionals from the United States to Vietnam for two weeks to teach and lecture at selected hospitals. Friendship Bridge can probably find a place for every American health care professional who volunteers for the two-week service since the need is so great.

Here is how Friendship bridge works: If you wish to volunteer for a 2-week lecture program or fill other professional needs in Vietnam, Friendship Bridge will make all the necessary arrangements, from forming the American teams (usually three or four professionals) to locating a specific hospital where you will teach (virtually no clinical medicine is practiced by Friendship Bridge volunteers) to arranging for your visa and reserving hotels, usually first class ones. Spouses may accompany the volunteers and often serve as well giving English lessons to Vietnamese citizens for using other skills they may have. Costs are approximately \$2,500-\$3,000 per person, sums that are paid directly to airlines, hotels, etc. Volunteers pay their own expenses. Friendship Bridge does not charge a fee for its services, though contributions (tax deductible as allowed by law) are, of course, always welcomed.

For more information, contact Dr. Theodore C. Ning, Jr., Friendship Bridge, 33424 Deep Forest Road, Evergreen, CO 80439, 303-674-0717.

HEALTH SYSTEM REFORM BILL SURGING THROUGH HOUSE

The House Democratic Leadership is currently pressing Democratic members of the House to *pledge* support for the Stark-Gephardt Bill (HR.5502) on health system reform. This bill would establish federal price controls on *all* physician fees as well as arbitrary global budget for health care

spending.

Representative Dan Rostenkowski (D-IL), Chairman of the House Ways and Means Committee, is reluctant to proceed with a full committee markup of the Stark-Gephardt Bill without assurance from the Democratic leadership that it has lined up at least the 218 votes needed to assure passage on the House floor.

The Democratic House members are divided on the proper approach to health care reform! The Conservative Democratic Forum (CDF) is opposed to the type of government regulation of the health industry contained in Stark-Gephardt. Instead, the CDF has proposed an alternative reform plan that would rely on managed care and stimulating market forces to restrain the cost of health care services.

PRESCRIPTION DRUG INDIGENT PROGRAMS

To help health-care professionals more easily identify and contact prescription drug company programs that provide free medicines to needs patients, the Pharmaceutical Manufacturers Association has published a directory listing 59 corporate programs.

PMA has also created a toll-free hotline to further assist physicians. The toll-free number is 1-800-PMA-INFO. For physicians within the D.C. metropolitan area, the number is 202-393-5200. Health care professionals may obtain a copy of the directory by writing Pharmaceutical Manufacturers Association, 1100 15th St. NW, Washington, DC 20005.

ACGME SLOWS SUBSPECIALITY GROWTH

The Accreditation Council for Graduate Medical Education voted to impose a one-year moratorium on the recognition of new subspecialties. The moratorium will allow an ad hoc committee to review

ACGME criteria and procedures. The accreditation council took the action in response to concerns that the medical profession is being fragmented. According to ACGME Chair George T. Lukemeyer, MD, many people believe that more generalists and fewer subspecialists are needed to deliver care. The council will address the subject with the 24 residency review committees at its September meeting. The council currently accredits graduate education programs in 24 core areas and 50 specialized areas.

FORMER YPS CHAIR JOINS AMPAC BOARD

Robert M. Bogin, MD, former chair of the Young Physicians Section, has been appointed to the American Medical Political Action Committee board of directors. "The appointment of this 35-year-old displays the continuing commitment of the AMA to mainstreaming young physicians," said current YPS Chair Joy A. Maxey, MD, of Georgia. Dr. Bogin is a member of the Colorado Medical Political Action Committee board of directors.

PRIVATE CARRIERS CONSIDER RBRVS

The AMA continues to monitor trends that could lead to private insurance companies' adopting Medicare's resource-based relative value scale for reimbursing physicians. A survey of commercial health insurance company executives found that any payment changes will be implemented slowly, with minimal impact on physician practices, the Dept. of Health Care Financing reported. A separate survey of state medical associations found that third-party payers in at least 13 states were using or considering the use of a Medicare-like schedule. Respondents cited Blue Cross and Blue Shield plans and Medicaid as being

most likely to adopt the Medicare schedule.

JAMA EDITOR CALLS FOR FIREARMS LICENSING

Violence in America is a public health emergency, said leading researchers and experts at a news conference in Washington, DC, at which 80 pieces of research on violence were released from the June 10 issue of the *Journal of the American Medical Association* and the AMA's nine specialty journals. Former Surgeon General C. Everett Koop, MD, and George Lundberg, MD, editor of JAMA, called for laws requiring that firearms be licensed, and proposed four prior conditions for owning and using a firearm:

- Require the owner/user to be a certain age and physical/mental condition.
- Require demonstrated skill and knowledge in the proper use of that firearm.
- Monitor the use of firearms.
- Forfeit the right to own or operate the firearm if these requirements are violated.

"These restrictions should apply uniformly to all firearms and to all United State inhabitants," Dr. Lundberg said. "No grandfather clauses should be allowed."

Other JAMA research found:

- The National Center for Health Statistics research notes that firearm homicide is the second leading killer of 15- to 19-year-olds in America and the leading killer of black males.
- More than five percent of Seattle 11th graders report owning a handgun, and one out of three report easy access to a handgun.
- The Centers for Disease Control reports that family and intimate assaults involving firearms are at least 12 times more likely to result in death than family assaults involving other types of weapons.

The question of whether gun reg-

ulation is a public health concern was hotly debated at the 1990 MMA Annual Meeting. Because MMA members remain divided on this controversial issue, the MMA has not adopted an official position.

BROCHURE PROMOTES IMPROVED RECORDS

Copies of "Principles of Medical Record Documentation" were distributed to members of the House of Delegates. State medical associations, county medical societies and national medical specialty societies also have received the brochure, which is the result of a year-long effort to enhance the quality of information in the medical record. Participants in the effort included the AMA, American Health Information Management Assn., American Hospital Assn., American Managed Care and Review Assn., American Medical Peer Review Assn., Blue Cross and Blue Shield Assn. and Health Insurance Assn. of America. The AMA believes that the brochure will reduce medical review hassles and promote more efficient physician payment. Copies are available from the Member Service Center, (800) 262-3211.

PHYSICIANS, EXPERTS ADDRESS THE \$800 BILLION QUESTION; WHY DO WE SPEND SO MUCH ON HEALTH CARE?

There is no single culprit for rising health care costs according to Daniel R. Waldo, an actuarial analyst at the Health Care Financing Administration. Waldo's laundry list of "suspects" who should share the blame for spiraling expenditures includes: fee-for-service medicine, excessive and overutilized insurance, and a demand for expensive, high-tech medical procedures.

Waldo believes substantive legislative reforms to slow health care costs are unlikely, because such re-

forms usually impose immediate hardships or incur immediate costs. "Taking this type of action," Waldo writes, "is very difficult for any politician."

BUSH OFFERS MALPRACTICE CURE

The Bush Administration sent malpractice reform legislation to Capitol Hill on July 2. The "Health Care Liability Reform and Quality of Care Improvement Act" is the fourth health reform initiative formally introduced by the President in the past two months. According to the President, the bill is designed to curtail the rapidly increasing medical liability insurance costs. The White House asserts that these costs are the fastest growing component of a physician's practice expense, rising at an average annual rate of 21.9 percent. This bill is similar in most respects to the malpractice reform bill introduced by Senator Hatch (R-UT) last year, S 1123.

Components of the bill will:

- 1) Require nonbinding arbitration or alleged malpractice for all health care that the federal government pays for or regulates. Such care would include Medicare, Medicaid, and all private plans covered by the Employee Retirement Income Security Act.
- 2) Establish incentives for states to adopt quality assurance measures and tort reforms.
- 3) Apply those tort reforms to actions brought against the federal government under the Federal Tort Claims Act.
- 4) Encourage some states to adopt demonstration projects that would provide for prompt payment of actual losses as an alternative to litigation.

The specific arbitration process would be set up by individual state governments. Where state arbitration systems are not in place, the federal government would provide

for an arbitration. In order to motivate states to enact quality and tort reforms, the federal government could withhold discretionary funding from states for failing to enact their own tort reform measures within three years. Gail Wilensky, the President's senior health care policy advisor calls this an "attention-getting strategy akin to the loss of highway funds if states did not raise their legal drinking age from 18 to 21."

The tort reforms include: 1) a reasonable cap on noneconomic damages; 2) the elimination of joint and several liability for those damages; 3) prohibiting double recoveries by plaintiffs; and 4) permitting health care providers to pay damages for future costs periodically rather than a lump sum.

The road ahead for the bill is difficult this year. Several other malpractice bills are pending before Congress and there is opposition from the legal and consumer community. However, the general concept of malpractice reform is widely seen as a must-do part of overall health care reform and will likely be included in any comprehensive health legislation passed by congress.

AMA ASKS OSHA REGULATION CHANGES

In a letter to the House Labor/Health and Human Services Appropriation Committee, the American Medical Association (AMA) asked the committee to require several changes in the Occupational Safety and Health Administration (OSHA) *standard on bloodborne pathogens*. The AMA specifically asked that OSHA reconsider the penalty structure for violation of the standard, reduce the thirty-year employee recordkeeping requirement, conduct a cost-benefit analysis of the standard's impact on physicians, and permit a one-year grace period for physicians who make "good faith"

efforts to comply with the standard.

The final items required by the standard — implementation of workplace and engineering controls, personal protective equipment, and housekeeping requirements: availability of Hepatitis B vaccinations to employees, post-exposure evaluation and follow-up procedures, and necessary labels and signs — went into effect on July 6.

CDC SEEKS VOLUNTEER DOCTORS FOR INFLUENZA SURVEILLANCE

Volunteer physicians are being sought by the Center for Disease Control (CDC) to participate in the sentinel physician surveillance network.

Beginning the first week of October and lasting through May, CDC monitors influenza in the United States through an influenza surveillance program. Each week throughout the surveillance season, volunteer physicians report the number of patients seen with influenza-like illness (ILI).

Each participating physician receives a subscription to the *Morbidity and Mortality Weekly Report*, which publishes influenza surveillance updates throughout the season, and receives feedback through quarterly written reports prepared by the surveillance coordinator.

Physicians who are interested in participating during the 1992-1993 season or who would like additional information may call 404-639-3865 or write Centers for Disease Control, Attn: Lee Schmeltz, US Influenza Surveillance Coordinator (A32), 1600 Clifton Road, NE, Atlanta, GA 30333.

STATUS OF CLIA IN GEORGIA

The Diagnostic Services Unit of DHR's Office of Regulatory Services is responsible for carrying out the

federal CLIA regulations in Georgia. In recent discussions with MAG staff member, Cam Taylor, they report that approximately 2204 applications have been submitted to date from private labs and physicians in Georgia. This is, they state, considerably lower than their estimates of about 3700 labs. Consequently, they are urging all physicians who do any of their own lab work to make sure they have sent in their application by September 1. There are a number of fines and penalties which could otherwise be imposed. In addition, no laboratory reimbursements will be paid to physicians who have not properly applied.

The state office presently has 10 people employed to handle this latest federal dictum and will be hiring at least 5 additional people by January, 1993. Their first priority will be to visit previously licensed labs after which they will begin visiting the larger physician practice labs and ambulatory surgery centers.

Physicians may contact Betty Logan or Genelle Wilks in Atlanta at the Diagnostic Services Unit to request a CLIA application form or to verify that their application has been received or other information at 404-894-5628 or 404-894-4747. Other CLIA hotline numbers which may be called but more difficult to reach are the national CLIA hotline in Baltimore at 410-290-5850 and Ruth McArthur of the Atlanta regional office of HCFA hotline at 404-331-0083.

The Georgia office cautions physicians that although various national laboratory accrediting bodies may eventually become approved for conducting CLIA inspections, none are presently approved. The final regulations governing these bodies were just published on July 31 and will not begin the approval process before August or September.

Of Hope and The World of Diddly Poo

Charles R. Underwood, MD

“At that moment they caught sight of some thirty or forty windmills, which stand on that plain, and as soon as Don Quixote saw them he said to his squire, ‘Fortune is guiding our affairs better than we could have wished. Look over there, friend Sancho Panza, where more than thirty monstrous giants appear. I intend to do battle with them and take all their lives. With their spoils we will begin to get rich, for this is a fair war, and it is a great service to God to wipe such a wicked brood from the face of the earth.’

‘What giants?’ asked Sancho Panza.

‘Those you see there,’ replied his master, ‘with their long arms. Some giants have them about six miles long.’

‘Take care, your worship,’ said Sancho; ‘those things over there are not giants but windmills, and what seems to be their arms are the sails, which are whirled round in the wind and make the millstone turn.’

‘It is quite clear,’ replied Don Quixote, ‘that you are not experienced in this matter of adventures. They are giants, and if you are afraid, go away and say your prayers, whilst I advance and engage them in fierce and unequal battle.’

As he spoke he dug his spurs into his steed Rocinante, paying no attention to his squire’s shouted warning that beyond all doubt they were windmills and no giants he was advancing to attack. But he went on,

‘The days of unilateral decision making rest in our past. Our future and that of our patients’ welfare beckons us to a cooperative adventure leading inevitably to success.’

so positive that they were giants that he neither listened to Sancho’s cries nor noticed what they were, even when he got near them. Instead he went on shouting in a loud voice, ‘Do not fly, cowards, vile creatures, for it is one knight alone who assails you.’

At that moment a slight wind arose, and the great sails began to move. At the sight of which Don Quixote shouted, ‘Though you wield more arms than the giant Briareus, you shall pay for it!’ Saying this, he commended himself with all his soul to his Lady Dulcinea, beseeching her aid in his great peril. Then, covering himself with his shield and putting his lance in the rest, he urged Rocinante forward at a full gallop and attacked the nearest windmill, thrusting his lance into the sail. But the wind turned it with such violence that it shattered his weapon in pieces, dragging the horse and his rider with it, and sent the knight rolling badly injured across the plain,

Sancho Panza rushed to his assistance as fast as his ass could trot, but when he came up he found that the knight could not stir. Such a shock had Rocinante given him in their fall.”

DON QUIXOTE DE LA MANCHA
Miguel de Cervantes Saavedra

“GENTLE READER,” for as such you would have been addressed by Sir Thomas Browne, Kt., M.D., when in 1643 his treatise *Religio Medici* first appeared in print, you shall not agree to nor appreciate all of what follows here. Bear in mind, and with understanding and compassion, that it represents but the observations and deductions of but your editor. Harbour no malice toward our organization, toward the MAG, for she has but only recognized the wisdom of allowing the expression of dissenting opinion in the hope that such will serve to lead us all to that solution of the problems besetting the world of providing care to the sick and injured of our lives. It is to that challenge we all have been called and by the success or failure of our efforts shall we all be judged.

What, indeed, one must ask at the onset, is the “world of diddly poo”? The word is a coinage the credit for which I must give to my minister, the Reverend David Glauner, who defines it as “the existence of things, of opinions, which are not as important as they seem to be.” As I understand it, some-

thing, a dictum or strongly held certainty for instance, which though viewed by an individual or an organization as *a priori* fact is indeed but the facing for underlying frailty. "Diddly poo" might then be viewed as a presumably solidly frozen lake which until one finds upon attempting to skate upon it that the ice is thin and fragile. Finds this out as they sink slowly into the frigid water beneath.

Let us begin, then, with a suggestion that the world of providing medical care as we have known it in the past may contain within its tenets and accepted dogma a certain amount of "diddly poo" should we attempt to carry these tenets and dogmas into the world of tomorrow's medical care. It hardly requires mention that we have seen change occur so rapidly over the past few years that even the best of us, and with the help of all the "consultants" we can summon or afford, find ourselves spending more time keeping up with the changes than caring for our patients. Those changes have touched every aspect of our lives, from our record keeping to our finances to our personal family lives, and all this leading to the manner in which we care for our patients. We are so bombarded by it all that we must ask if these radical alterations in the health care system which seemed to be working well became to appear inevitable and irreversible because there has been a certain amount of "diddly poo" in our past convictions and actions. Viewed from the vantage point of today's world and tomorrow's requirements, I must conclude that such is the case. If indeed that is true, then we need to prepare for a world of permanent change.

We know ourselves pretty well, I do believe, but our future world will require that we know ourselves, "see ourselves," and that we

make the effort to see and know tomorrow's health care environment as those other "parties" see us and as they view the world in which we will carry out our medical careers. That is one very basic concept we must embrace. We may yet be the "captain of the ship" but it becomes ever clearer that other parties are helping to chart the course which our vessels sail. Therefore, with this in mind, let us listen to the voices of some of those other parties with whom we shall deal in the future. Listen to how they view the evolution of our "health care system" and how they view us and our place in that system.

Bernard R. Tresnowski is the President and CEO of the Blue Cross Blue Shield Association, the umbrella organization for a national network of locally independent third party payor companies. He represents one of the major voices for that portion of the forces impacting the economic development of the evolving health care system of our country. The following remarks were made on the occasion of Mr. Tresnowski's presentation to the 1991 "Annual Report to the Plans":

"As we look back over the years at persons in our organization who were willing to take risks, who sounded the clarion call for changes at critical junctures in our history, we can see that we have been especially blessed. They stand out from those who postured, who followed their own agendas or their self-interests. What set them apart was their courage, their stamina, their intellect — their credibility.

You have indicated to me that the time is right for us to step forward with confidence to articulate what we know, what we do and what we recommend in developing a workable national health care

policy. You have encouraged the development of our corporate vision and been unrelenting in your desire to have that vision serve as the focal point of debates and decisions about our future.

What you have said is that we are torn between two forces. First is our allegiance to our heritage as community-based, not-for-profit health insurance organizations with a very strong commitment of service to the American people. Opposing that are many of the pressures we face in the marketplace: escalating health care costs, public outcries against the high cost of coverage and competitors who exploit the extremes in underwriting practices. The marketplace realities force us to re-examine our mission, philosophy and business practices.

This conflict has been most recently represented by Empire Blue Cross and Blue Shield's painful experience in seeking necessary rate increases to provide protection to high-risk individuals who do not have access to other carriers. In some cases, the Plan situations are made more difficult by the hostility of the corporate buyer, by the uncertain and contradictory incentives expressed by the provider community and by state policy makers who — under political pressures — mandate programs that ultimately have negative effects on health care cost, quality and access.

Meanwhile, individual consumers are beset with anxieties about the health care system. Research conducted for us this year by the Roper Organization found that individuals feel frustrated and helpless. They say they have little or no control over the increasing cost of their own health care. Against this backdrop, the news media fuels increased concerns with constant and unrelenting characterizations of the health care industry as one in serious crisis. While it has been

politically expedient to point to the problems of diminished access to care, the fact remains that the overriding issue creating the problem of access and the concern about the adequacy of the health care system is the continuing escalation of health care costs. Spending on health care in the U.S. increased 10.5 percent last year. It totaled \$666.2 billion, an amount equal to 12.2 percent of the nation's gross national product. The Department of Health and Human Services reported that while inflation accounted for a large part of the increase in health expenditures, 'volume and intensity of services' also played a role.

I think it's important to put those statistics into perspective. It took decades to evolve the structure and incentives that give rise to the problems we face in terms of costs. What we need to do is to address that problem by evolving another set of incentives and structural changes that may well take at least a decade or more to have their greatest effect.

As we pause now on this occasion to look to the future, it is essential that we be realistic about the forces that are changing our business and our lives. Make no mistake — while we try to influence the larger forces that argue for massive health care reform — we have been and will continue to be on a path of evolutionary change. It is these incremental and evolutionary changes which will, in fact, make the biggest difference in our business and our lives.

Examples of these changes include: the pervasive influence of DRG payments to hospitals; the RBRVS basis of payments to doctors and its potential for significant change in their behavior; the recently enacted law on Medigap reform driven by the desire for 'truth in packaging'; the impending enactment of small group market re-

form; and our policy objective of moving the insurance industry in the direction of 'qualified carriers.'

These changes all are guided by a desire to make the health care delivery and financing system more publicly accountable. Absent the discipline of effective market forces, we search — as a society — for a balance between public and private initiatives that will not stifle innovation and creativity. This is the world we shall live in, at least over the next decade. It will not be a question of either/or — such as public or private — but rather how to strike this balance. It is important that these changes not go 'unnoticed' as we attempt to courageously adapt the way we organize our work and the way we live.

Here again is where leadership becomes the determining quality for our future — leadership that will have the courage to ask the tough questions of whether we possess the human and financial capital that can make us more publicly accountable. And it will be a quality of leadership that welcomes the discontinuity of these changes as we face new challenges, new players, new requirements. Those among us who long for the good old days or eagerly anticipate the tranquillity of retirement had better step aside right now. There is too much at stake. We need people with the capacity, insight, sensitivity and resources to positively shape our future. We need credible leadership more than at any time in our history."

And then involved in all this decision making is the hospital industry. Most of us carry on our daily work in such institutions. We and our patients depend on them, on their efficiency and integrity and fiscal stability, not only to carry out the mission of providing quality health care we pride ourselves for but also for our own fiscal stability.

For our "livelihood," Richard Davidson is the recently positioned Chief Executive Officer of the American Hospital Association. He, as Bernard Tresnowski also, speaks from a position of influence. Listen then to comments made by Mr. Davidson as I heard them made at a recent presentation to the Georgia Hospital Association.

"Physicians will always be at the center of any change in the system. . . . We must consider, look closely at what is best for the community, for the people, and not what is best for physicians or hospitals or nurses or any other particular entity. . . . We are entering into an era that will require collaboration. We have just come through an era of competition. . . . The American Hospital Association's plan for the health care system of the future says plainly that competition has not worked and that we must move toward an era of collaboration. The status quo is no longer acceptable. . . .

The big question concern how much the 'stake holders,' all those parties involved in developing the new health care system, are willing to concede. I believe they are all ready to cooperate and to concede to some reasonable degree positions previously held rigid and unchangeable. . . . Whoever is elected President in the upcoming election, something will happen on a national basis in regard to the health care system. Something must be done in the next twelve to thirty six months or we will have an all-payor system which will be highly regulated in the manner of the DRG and the RBRVS. This will not be good for the country. . . .

Health care is a local issue, like politics, and it must be solved locally by collaboration among the several parties in-

EDITOR'S CORNER

volved in making the system work. . . . We must have physician cooperation in the American Hospital Association plan or else it simply won't work. . . . The final solution of the payment system will most likely be a capitated one focused on medical outcome. . . .

Although the physician must be at the center of the system, must be the 'quarterback,' the several decision-making parties around the table, the hospitals and the physicians and the payors and the consumers, must have an equal position of decision making."

Such are the opinions of two individuals who speak from positions of power and influence and

who will be sitting about that decision and strategic planning table with us as the health care system of our future lives is designed. Dismayed, disgruntled, tired, and discouraged though we be, nonetheless the juggernaut of change is irrevocably underway. Who among us possesses the wisdom and precocious insight to say that it will not be a better world, a better and more efficient environment, in which to care for the sick of our world? The long and tiresome hours of our training years for most of us, spent with insulting compensation — the sacrifice of family taking with it the joy of participating in and enjoying our children mature — the uncontrolled "hours on call" leading to physical exhaus-

tion and, in too many instances than we care to admit, leading to substance abuse, might well be matters of our past. Perhaps, just perhaps, it will be a new and better manner in which to "practice medicine" than we have ever known. Nonetheless, the new technology — the new fiscal environment — the new "consumer" lie before us and with them we must contend. The days of unilateral decision making rest in our past. Our future and that of our patients' welfare beckons us to a cooperative adventure leading inevitably to success. The Psalmist knew well our present turmoil and predicts, I do believe, our hope —

"Weeping may tarry for the night, but joy comes with the morning."

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Empowering the Medical Staff Through Their Bylaws

Howard L. Lang, MD

THE PHYSICIAN-HOSPITAL relationship is a special, and in many instances a vital, aspect of the practice of medicine. And medical staff bylaws are at the very heart of that relationship.

Generally speaking, the medical staff bylaws provide a structure for the smooth functioning of the medical staff which transcends individual personalities, is able to respond to changing circumstances and provide security for both the medical staff and the Board of the hospital. The bylaws describe the rights and responsibilities of individual staff members. These bylaws are a contract between the medical staff and the Board. They are where the relationship between the organized medical staff and the governing board/administration is delineated and defined. Where not explicitly recognized as a contract, the courts recognize that bylaws impose certain legal obligations on the hospital and are enforceable in court. According to Barron's *Dictionary of Business Terms*: a contract is a transaction involving two or more individuals whereby each has reciprocal rights to demand performance of what is promised.

The medical staff bylaws should be adopted by the medical staff to provide for the organization of the medical staff and to provide a framework for self governance in order to permit the medical staff to discharge its responsibilities involving the quality of medical care and

‘The bylaws should provide the professional and legal structure for medical staff operations, organized medical staff relations, and relations with applicants to and members of the medical staff.’

to govern the orderly resolution of those purposes. The bylaws should provide the professional and legal structure for medical staff operations, organized medical staff relations, and relations with applicants to, and members of, the medical staff.

The medical staff bylaws must be developed by the medical staff and are subject to the approval of the governing board which should not be unreasonably withheld. The bylaws should provide for:

1. Election of officers; composition of the medical executive committee.
2. Fair hearing and appellate review.
3. Corrective action.

Dr. Lang is Immediate Past Chairman of the AMA's Hospital Medical Staff Section and Immediate Past President of the California Medical Association. Send reprint requests to him at 805 S. Eliseo #5, Greenbrae, CA 94904.

4. Organizational structure of the medical staff.
5. Communication with administration and board.
6. Adoption and amendment of bylaws.
7. Frequency of meetings and attendance requirements.
8. Participation in hospital deliberations affecting quality of care.

The development of the medical staff bylaws must be done in conjunction with the advice of the independent legal counsel for the medical staff. The medical staff should *never* be in the position of responding to medical staff bylaws drafted by the hospital attorney.

While it is easy for an advocate to state legal principles with certainty, legal issues are rarely clear cut. Where there is an unsettled issue of importance to medical staffs, and hospitals — especially an issue which relates to the relative authority of either group — an attorney whose allegiance is to the governing board will most likely reach conclusions favorable to the board.

Hospital attorneys are paid to look out for the interests of the *hospital*, not the medical staff. I have been following these issues for many years now, and I have seen too many instances where to promote bylaws and policies favorable to the administration, the hospital attorney interprets the laws in such a way that any ambiguities are re-

solved in favor of the hospital, and quotes only from cases on their side.

It is essential that the medical staff draft its own bylaws because then the medical staff is able to insert language that reflects its values, safeguards its interests, and is enabled to articulate the policies and procedures its members can support. The governing body would then be placed in a reactive posture to identify reasons why specific language should be changed.

“The development of the medical staff bylaws must be done in conjunction with the advice of the independent legal counsel for the medical staff.”

Where does this self-governing medical staff come from? If you would believe the hospital attorneys, you would think that the medical staff exists because of the benevolence of the hospital board. That is why you will hear the word *delegation* repeated so often. We exist at their pleasure, and what we do is *delegated* to us.

The fact is, the existence of an organized medical staff is usually required, directly or indirectly, by hospital enabling statutes, by licensing laws and regulations, or by the accrediting agency of the hospital, to perform certain functions required for the lawful operation of the hospital.

Furthermore, the medical staff, as an organization of professionals possessing special expertise, knowledge and training, discharges certain inherent — not delegated — professional responsibilities. The Board cannot delegate those

functions which it cannot itself exercise. Since the governing body does not have medical qualifications, it more accurately *requires* rather than delegates the performance of professional functions by the organized medical staff.

Why is this use of inherent vs. delegated so important? Because anything that is delegated can be taken away. And that cannot be done without due process as defined in the medical staff bylaws.

A key empowering feature of the medical staff bylaws is that they provide the medical staff with a framework for self-governance. What does self-governance mean? Self-governance is the exercise of the inherent authority regarding such matters as the regulation of professional practice and the setting of professional standards in a manner provided by and through an organizational structure specified in the medical staff bylaws or by law. It means the election of the officers and structure of the medical staff by the members of the medical staff. It means protection against the imposition of new or revised medical staff bylaws against the wishes of the medical staff and the amendatory process specified in the medical staff bylaws. Self-governance means that the medical staff is professionally independent in exercising medical judgment and shall remain free from any interference influenced by considerations that may conflict with optimum patient care.

If this sounds too aggressive to you, I would only point out that those who espouse control of the medical staff are certainly not shy about aggressively advocating their points of view. Just talk to physicians who have been to the Estes Park Seminars. They have been exposed to a line of thinking which is antithetical to the policies of organized medicine.

The Horthy-Springer law firm has

been preaching the “gospel” that the medical staff is simply an organizational extension of the Board. They argue that the *delegation* (there’s that word again) of authority to the medical staff is no different than the Board’s delegation of certain of its functions to management, housekeeping and nursing. In their Action Kit publication, they write that “the medical staff of the hospital today is no more separate than the nursing department.”

Attorneys representing hospitals have stated that “the medical staff has no rights as a group,” or “the medical staff is not a separate entity and therefore cannot assume or exercise authority or responsibility as a discrete group” and “the medical staff and its members are merely agents of the hospital.”

While some hospital administrators and trustees may be enchanted with the idea that the medical staff is no different than the dietary department, more thoughtful individuals will be less comfortable with the implication that administrators and trustees have the same responsibilities for medical services as they do for food services.

“It is essential that the medical staff draft its own bylaws because then the medical staff is able to insert language that reflects its values, safeguards its interests, and is enabled to articulate the policies and procedures its members can support.”

Following the Horthy-Springer advice invites the Board to accept responsibilities which the law has not

imposed and which the board and administration is ill prepared to discharge. In terms of working relationships, this advice invites confrontations to the detriment of all concerned. Their approach, if ill advisedly followed, would remove checks and balances which serve a vital public purpose particularly in this time of change.

As individual physicians, or as members of medical staffs, the reason we do what we do is rooted in patient advocacy. It is why we organize into medical staffs. It is why we went to medical school. The independent self-governing medical staff is the means for ensuring that our patient advocacy will be more than just a heartfelt sentiment. Through self-governance as delineated in the medical staff bylaws, we can be sure that we can protect the rights of our patients and the prerogatives of the medical staff.

‘The Horthy-Springer law firm has been preaching the “gospel” that the medical staff is simply an organizational extension of the Hospital Board.’

Well then, what is the medical staff? This leads us into the discussion of the legal status of the medical staff.

In one of their Action Kit newsletters, the Horthy-Springer firm advanced the idea that consideration of the medical staff as something separate from the hospital is “legally dangerous and that physicians will find themselves facing multi-million dollar antitrust and negligence lawsuits as a result.”

This merely represents another

attempt to undermine the concepts of self-governance as defined in the medical staff bylaws by raising legal bogeymen with phantoms of cataclysmic legal consequences. Advice from independent medical staff legal counsel can obviate these concerns and puncture the balloon of an antitrust holocaust.

It has even been alleged by some hospital attorneys that simply seeking legal advice from independent legal counsel exposes the medical staff to antitrust risks. Advice from legal counsel is a customary incident of organizational activity and is a necessary aspect of the activities of a medical staff. Through denial of access to independent legal advice, a medical staff would be prevented from learning its rights or protecting them in a meaningful or timely way.

Liability under the Sherman Act, Section 1, requires an agreement, combination, or conspiracy among two or more entities. While it is generally true that a conspiracy cannot be found within a single corporate entity, the fact that a medical staff seeks advice from independent legal counsel will not increase the risk that an unlawful combination or conspiracy will be found.

Simply put, as stated by the Weiss Court, antitrust policy requires the court to seek the economic substance of an arrangement, not merely its form. As the Court stated in *Virginia Academy of Clinical Psychologists v. Blue Shield of Virginia*, “It is not enough to assert, as defendants do, that a corporation cannot conspire with itself. We must look to substance rather than form.”

Despite the attempts to relegate the medical staff to the status no different than the dietary department, it cannot be believably argued that a medical staff has no status cognizable under the law.

The first statement, that physicians should be organized as a distinct group, goes back to 1918 with the promulgation of the *Minimum Standards* of the American College of Surgeons, as part of an effort to ensure the delivery of quality patient care. Formal organization, bylaws, and self-governance are all characteristics of an entity cognizable under the law.

‘It has even been alleged by some hospital attorneys that simply seeking legal advice from independent legal counsel exposes the medical staff to antitrust risks.’

A group of individuals organized for a special or mutual purpose and called by a common name constitutes what is called an “unincorporated association.” An unincorporated association is entitled to recognition as an entity for many purposes, and it may exercise rights, including the right to sue in its own name and to retain attorneys. Labor unions, political parties, social clubs, church organizations, athletic organizations, veterans groups, and medical staffs have been deemed to be unincorporated associations.

It was suggested in one Action Kit article that if medical staffs are not brought within greater control of the hospital so as to preclude their being viewed as separate entities than “if one physician on the staff were sued for malpractice, all the rest could be held liable for his negligence on the theory that they should not have allowed him to practice on the staff.” The case that is cited is *Corleto v. Shore Memorial*

Hospital. In that case, the court simply ruled that a medical staff could be named as a party in a lawsuit because medical staffs are unincorporated associations. The case was settled out of court before the issue of medical staff negligence was litigated.

What is very interesting is that in an earlier edition of Action Kit it was stated, "*Corleto* is not precedent. It is not the law in any state and in our opinion is not likely to be widely followed by state appellate courts. *Corleto* is nothing more than a legal anomaly, a non-precedent which has been given far more attention and credence than it deserves. The idea that every member of a medical staff can be held accountable for the negligence of one of their members should be laid to rest once and for all."

These seemingly contradictory statements by the same authors citing for support the proposition that medical staffs risk horrendous liability, in a case which they earlier described as a legal anomaly, a non-precedent, leads me to the conclusion that attempts to gain physician cooperation is by invoking horrible legal consequences. This is another example of why medical staffs should have their own independent legal counsel.

“The composition of the Credentials Committee as described in the medical staff bylaws should consist only of medical staff members.”

To further diminish the rightful authority of the medical staff, it is stated that medical staff bylaws must avoid any indication or implication that the medical staff is a distinct entity, separate and apart

from the hospital. It is argued that since the medical staff is within the hospital corporate structure, it can have no separate existence, no separate responsibilities, and most of all no separate rights.

At one of the Estes Park seminars, it was recommended that words such as "self-governing," "organized themselves" into a medical staff should not be used in medical staff bylaws because "that tends to portray the staff as the equivalent of a collective bargaining unit as opposed to an operational creation of the board."

They even recommended against the use of the term medical staff "members" because they stated this term implies "that the staff is a separate organization which the physicians have 'joined.' They have not joined, they are appointed to the staff by the Board of the hospital."

The issue of separateness depends on the issue at hand. A whole can have many parts. An entity which is a unitary whole as to third parties may still have a degree of internal separateness. There is ample precedence recognizing the legal separateness of a part within a whole, even though the component in question is subject to varying degrees of control by the other party. This view permits both the governing board and the medical staff to effectively exercise their responsibilities without any need to extinguish the legitimate rights of the other or to deny the existence of the other.

One of the legitimate rights of the medical staff, as defined in the medical staff bylaws, which allows the staff to fulfill its mission of providing quality care is the credentialing process. There are now occurring attempts to have Board membership on medical staff credentials committees. In fact, a medical staff in Savannah has the Medical Staff Credentials Committee as

a Committee of the Board.

The process of medical staff credentialing has three major components:

1. Evaluation for medical staff membership.
2. Delineation of specific privileges that may be exercised by individuals granted staff membership.
3. Systematic monitoring and review of the individuals continuous competency.

It is the role of the medical staff

“The *Darling* case is frequently cited by hospital attorneys to justify overreaching by hospital boards in credentialing decisions and is now being used as justification for the validity of economic credentialing decisions.”

to develop reasonable criteria and fair procedures for evaluation, appointment, and delineation of privileges. Information and data must be gathered and forwarded to the Board in support of its recommendation. The Board then acts on the medical staffs recommendation after making certain that all supporting information is complete.

One can understand Board interest in seeing that the medical staff discharges its responsibilities properly. However, the Board is ill advised to succumb to the temptation to do those things which the medical staff must do.

Where in the credentialing process just described can the Board have meaningful input? The procedures as outlined can only be performed by licensed professionals.

The composition of the Credentials Committee as described in the medical staff bylaws should consist only of medical staff members.

Appointment of Board members to such medical staff committees blurs the distinction between medical staff and Board responsibilities and is an impedance to the free and frank discussions that such committees depend upon.

I have a nagging, uneasy feeling that some of the thrust toward Board or CEO representation on medical staff committees is directed toward an attempt to involve the medical staff in setting criteria for the business aspects of credentialing and utilization review.

As was stated in another Action Kit article, "The Board will have to take whatever action is necessary to preserve the hospital's fiscal viability. It makes no sense whatsoever for any business, especially one as large and complex as a modern hospital, to allow that portion of the business concerned with offering its primary product line to the public to act as an autonomous or quasi-autonomous unit." This confirms the statement of a hospital industry spokesperson who stated that credentialing and reappointments are critical factors in cost containment.

The medical staff bylaws are the only mechanism by which the medical staff can resist many hospitals attempt to redefine the role the medical staffs play in the functioning of the hospital. Some hospitals, with the type of legal advice I have been speaking about, assert that it must be free to act unilaterally, with minimal or no medical staff input, because the policies and decisions at issue are "business judgments" which lie within the hospitals exclusive domain.

In addition to the antitrust bogeyman, another frequently used le-

gal smokescreen is that of the doctrine of corporate negligence. The corporate negligence doctrine, first recognized in *Darling v. Charleston Community Memorial Hospital*, imposes on hospitals certain duties owed directly to the patients. The *Darling* case is frequently cited by hospital attorneys to justify overreaching by hospital boards in credentialing decisions and is now being used as justification for the validity of economic credentialing decisions. The liability of the hospital under this doctrine is predicated on the finding of a breach of separate duty, not on a theory of respondeat superior for the physicians negligence.

‘The argument that self-governance results in an increased potential for hospital and physician liability is not supported by the case law.’

In *Darling*, the hospital's duties included requiring "consultation with or examination by members of the hospital surgical staff skilled in orthopedic medical care and having an adequate number of trained nurses to provide satisfactory post-operative care." Because the hospital breached these duties, it was liable for the negligent treatment rendered by the physicians and nurses. The liability which was imposed on the hospital in *Darling* was for the hospital's *own negligence*. To say simply that *Darling* holds that a hospital can be held liable for the negligent acts of its medical staff physicians is misleading.

The Florida Supreme Court recently adopted the corporate negligence doctrine in *Insinga v. La Bella*. In that case, the hospital did not follow its own procedures requiring verification of a medical staff applicant's credentials, thus allowing an "imposter" physician to gain privileges and harm a patient.

None of the corporate liability cases describe a situation where the exercise of self-governance led to hospital liability. They are cases where the *hospital* failed to do its job. The argument that self-governance results in an increased potential for hospital and physician liability is not supported by the case law. In fact, if the self-governing medical staff is obliterated, the liability for hospitals will increase. The hospital can protect itself by insisting that the medical staff functions as self-governing medical staffs are intended to function.

Well constructed medical staff bylaws will allow the medical staff to function as it should, and fulfill its moral, ethical and legal mandates. Achievement of the goal to provide effective and quality medical care in the hospital will be accomplished when the medical staff and the Board acknowledges each other's rights and responsibilities. A relationship of mutual accountability, reciprocal surveillance, and equality must exist between the organized medical staff and the hospital Board before any hospital can deliver quality medical care to the public.

Contractual relationships provide for accountability between the parties, and the relationship between Board and medical staff set out in the medical staff bylaws should be no different. The acknowledgments and implementation of medical staff self-governance will benefit patients, the hospital, the community it serves and members of the medical staff.

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Juggling Fiduciary Responsibility (Part 2): Are You Saving Too Much for Retirement?

Stephan C. Barton

THE FEDERAL government wants your pension and retirement money. The feds are not even trying to conceal their intention to raise funds from fines and penalties in an effort to offset the federal budget deficit. The Commissioner of the IRS announced a few months ago his intention to hire 963 new employees in an effort to audit more large corporations and upper-income taxpayers. Commissioner Goldberg admitted that the increased audits of people whose incomes exceed \$100,000 would bring in the most revenue to the Service.

The most direct pressure from this added "IRS firepower" will be felt in retirement plans. Larry Zimpleman, Chairman of the Pensions Practice Council of the American Academy of Actuaries, recently remarked, "When our nation sank into deficit problems in the early 1980s, we saw an increasing number of bills aimed at . . . increasing tax revenue by reducing the money in pension plans." Simply put, the IRS has targeted retirement plans because that is where the greatest block of money is.

The "Success Tax"

The IRS has been able to extract more money from retirement plans since the Tax Reform Act of 1986 created an excise tax of 15% for excess retirement distributions during life and excess retirement accumulations at death. Amounts accu-

'The IRS has targeted retirement plans because that is where the greatest block of money is . . . [they] are not even trying to conceal their intention to raise funds from fines and penalties in an effort to offset the deficit.'

mulated in or distributed from pension or profit sharing plans, IRAs, and tax deferred annuities must be aggregated to determine whether an excess exists.

If total distributions in a calendar year exceed \$150,000 (or \$112,500 — indexed for inflation to \$140,276 for 1992), a penalty tax of 15% is imposed on the excess portion of the distributions. The excise tax is levied in addition to prevailing federal and state income taxes.

The 15% penalty tax on excess accumulations is intended to pre-

vent people from avoiding the excise tax on distributions by permitting funds to build up in retirement plans until the death of the plan owner, when the assets typically pass to a spouse.

Now, the term "excess accumulation" means any excess of the value of a person's retirement funds as of the date of his/her death, over the present value of a single life annuity with annual payments equal to the greater of \$150,000 (or the indexed 1992 amount of \$140,276). This tax is NOT reduced by any estate or settlement deductions and unified credit cannot be used to offset this tax. However, if a surviving spouse is the beneficiary of all of the decedent spouse's retirement plans, he/she can elect to have the excise tax not apply at the decedent spouse's death. If this election is made, the decedent spouse's retirement funds will be added to those of the surviving spouse for purposes of computing excess retirement distributions and accumulations for the surviving spouse.

The Success Dilemma

There is a real dilemma facing physicians who have successfully accumulated large sums in all of their combined retirement vehicles. If retirement distributions are increased to avoid the excise tax on excess accumulations at death, the increase could trigger the tax on excess distributions during the physician's lifetime. If retirement

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distributions are lowered to avoid the excess distributions tax during life, the estate may be substantially decreased with excess accumulations tax at death. When you combine the excess accumulations or distributions tax with the other potential tax risks (federal estate tax, generation skipping transfer tax, and state and federal income tax), a family can lose more than 75% of the aggregated retirement benefits it has "inherited."

Dr. Worst Case Scenario

Dr. Scenario is 50 now, and he plans to retire at age 65. He wants a comfortable retirement for himself and his wife and a good estate left for his children and grandchildren. To accomplish his goals, Dr. Scenario has put the maximum (\$30,000) into his retirement plan

“The Tax Reform Act of 1986 created an excise tax of 15% for excess retirement distributions during life and excess retirement accumulations at death.”

each year and has now accumulated \$1,000,000.

The plan is earning 8% per year, and at that continued rate, his balance will be \$3,172,169 at age 65. That amount is enough that, should he die that year, his heirs — other than his wife — would owe a 15% tax on excess accumulations, or \$407,903; a 55% federal estate tax, or \$1,520,346; a generation skipping transfer tax on amounts exceeding \$1,000,000 to grandchildren, or \$86,552; and federal and state income taxes on the lump sum remaining after estate and gen-

eration skipping transfer taxes are deducted, or \$547,845.

Dr. Scenario had \$3,172,169 in his retirement plan when he died. His estate paid a total of \$2,562,646 in taxes, leaving only \$609,523 available to heirs, an 81% shrinkage in his retirement fund. All Dr. Scenario wanted to do was to take care of his family. What he did was take care of the IRS.

Limited Awareness

The newest of these multiple taxes, the 15% tax on excess distributions or accumulations, seems to be the least familiar to physicians. Many physicians simply assume that pensions are exempt from taxes as they once were, but the tax law changes in the 80s changed that. Other medical practitioners find it hard to fathom that they could possibly be "overfunded," since they have not contributed the maximum each year. However, when time is mixed with compounding interest at even modest returns, a mushrooming effect propels pension assets to surprising totals. If the assets in a plan were invested in the bull market of the last decade, unusual growth occurred that put the plan's normal growth curve 10-15 years ahead of schedule. Other physicians have not shown much alarm since their CPA mentioned the indexing of the maximum distribution (now, greater of \$150,000 or \$140,276), relative to the cost of living adjustment (COLA). If the index continues to average approximately 4% per year, the maximum annual distribution will be \$207,642 in 10 years, and \$252,629 in 15 years.

However, the possibility of overfunding is still great in many cases. Let's assume that a 50-year-old physician has been contributing \$30,000 to his retirement plan for 10 years now, and plans to continue contributions to age 65 when he retires. His plan is in a balanced

fund that has averaged 10% per year thus far. If all factors remain the same until age 65 (\$30,000 contributed each year; 10% interest earned), the physician will have accumulated \$2,950,441 at retirement. If he annuitizes his balance over his life expectancy, his annual withdrawal amount would be \$367,810, or \$115,181 overfunded from the 4% indexed withdrawal allowed in 15 years, or \$252,629.

“When you combine the excess accumulations or distributions tax with the other potential tax risks (federal estate tax, generation skipping transfer tax, and state and federal income tax), a family can lose more than 75% of the aggregated retirement benefits it has “inherited.”

How To Avoid The Tax

Three simple guidelines can assist you in avoiding the painful bite of the "success tax." First, avoid high-risk/potentially high-return investments on a majority of your pension funds. Most advisors agree that high-risk investments should be limited in retirement portfolios, especially for investors who are over age 50. A substantial loss of capital in a retirement plan, without years left in a career to replace those funds, can potentially downgrade a person's retirement lifestyle permanently. And if you are fortunate enough for your high-risk investments to yield high returns, the

reward is likely to be a 15% penalty for an overfunded plan.

Secondly, try to avoid leaving pension assets to heirs. Instead, concentrate on spending pension assets to support your lifestyle, and leave other assets to heirs. By following this practice, your heirs can avoid federal and state income taxes on their inheritance, as well as the 15% success tax on any excess accumulations you might have left at your death. For large estates, a helpful idea is to use pension funds as a gift to a charitable or non-profit organization via a charitable remainder trust, as charities are exempt from estate and income taxes. Another alternative could be for the pension money to go first to a surviving spouse (since no estate taxes would be due then), and arrange for the surviving spouse to leave the funds to charity at his or her death. This procedure would allow the couple to have access to

‘Three simple guidelines can assist you in avoiding the painful bite of the “success tax.”’

the account balance for as long as they might need it. If a charity and children are desired beneficiaries, it is better to give pension funds to the charity, and other assets to the children, so that the children avoid income tax.

Thirdly, if your financial advisor has evaluated your retirement plan and has determined that you likely will be “overfunded” at an age you plan to retire, you need to cease or restrict your future pension contributions. As an alternative, many physicians are investing in vehicles and plans that are not restricted by

ERISA laws, such as deferred compensation, death benefit only plans, and private pension plans. The most popular alternative has been the private pension plan, which typically is funded through a special universal life insurance policy with low administrative costs and no premium load. After tax funds are contributed to the insurance company, the funds compound tax-deferred, and most of the principal and interest can later be withdrawn tax-free via interest-free loan provisions in the policy. The loans are repaid with the death benefit. This vehicle is performing exceptionally well in cases where highly rated insurance companies are used, and the smallest face amount of insurance is matched to a desired contribution amount to conform to the TAMRA (Technical and Miscellaneous Revenue Act of 1988) and DEFRA (Deficit Reduction Act of 1984) limitations.

Medical Ethics: The AMA's Leadership Role

Genetic testing. Assisted suicide. Rationing. Self-referral. Confidentiality. Health care today, because of an increasingly advanced technology and complex legal system, forces physicians to make decisions based on complicated clinical requirements and new moral assessments. The need for ethical guidance has never been greater.

Since its founding in 1847, the American Medical Association has maintained rigorous standards of ethical professional conduct to guide physicians in making patient care decisions.

Today, the AMA provides physicians with a code of ethics comprised of three integrated components: *Principles of Medical Ethics*, *Current Opinions of the Council on Ethical and Judicial Affairs*, and *Reports of the Council on Ethical and Judicial Affairs*.

The AMA's Code of Ethics: The code of ethics has guided physicians on a wide variety of ethical questions, and has often pioneered progress in ethical thought. In recent years, the AMA has issued pathbreaking opinions on physicians' obligation to treat patients with HIV and on the patient's right to refuse artificial life support when terminally ill.

The AMA's code of ethics has been recognized as an authoritative source of medical ethics by physicians, courts, legislatures and medical licensing boards. The AMA's opinions on specific ethical question are frequently cited in court decisions and Congressional debates. Your patients and the public in general rely on the AMA's code of ethics to identify the rights and responsibilities of patients and physicians.

Inspired by the Oath of Hippocrates, the *Principles of Medical Ethics* instruct the physician to provide

competent medical service with compassion and respect for human dignity. They direct the physician to expose colleagues who are deficient in character or competence and to seek changes in laws which are contrary to patients' best interests. They safeguard patient confidence and the pursuit and sharing of scientific knowledge with colleagues. Finally, they point out the physician's responsibility to contribute to an improved community.

Current Opinions elaborate on how ethical principles apply to today's medical practice. Issue categories include: physician's duties to patients, social policy issues, and inter-professional relationships. Currently, the AMA has issued more than 100 current opinions and reports on specific ethical questions.

Reports of the Council explain in greater detail why the AMA has taken positions on specific ethical issues in medicine. They give insight and practical guidelines or recommendations to help practicing physicians with their decisions. *Reports* cover 15 different topics ranging from conflict of interest to guidelines for institutional ethics committees.

In the coming year, the AMA will accelerate review and revision of *Current Opinions* and support adherence to them through organized medicine and state licensing boards; to increase their dissemination and make them as accessible as possible to all our members.

It is clearly evident that concerns about the nature of care, autonomy and justice are not far from the mind of patients, physicians and the courts. As technology expands, ethical dilemmas encompass new territories: fetal tissue transplants, genetic engineering and issues regarding the quality of life. As in the past, the AMA will continue to provide guidance on moral as well as medical aspects of your patients' health.

Medical Staff Bylaws: A Contract or a Meaningless Mouthing of Words?

Richard H. Vincent, Philip M. Rees

IMAGINE YOURSELF in the following situation: As a Georgia physician you happen to be a member of the medical staff of two unrelated hospitals in your community — one “public” (e.g., owned and operated by a local hospital authority) and one “private” (e.g., owned and operated by a for-profit proprietary chain). When you first joined the staffs (and upon each reappointment to the staffs), you agreed to abide by the medical staff bylaws at each hospital. Although the medical staff bylaws at both hospitals contain specific procedures governing any effort to restrict or terminate your staff membership or clinical privileges, both hospitals have recently informed you that your clinical privileges are being terminated. You are unaware of any problems at either hospital and neither notice of termination provided any reason for the termination or any acknowledgement of due process or other hearing rights provided to physicians under the medical staff bylaws. You pick up the telephone and call your attorney to discuss the problem.

You ask whether or not each hospital must follow any due process procedures prior to terminating your clinical privileges. Your attorney (fortunately for you) is up-to-date on hospital/medical staff issues. He explains that since you are dealing with different *types* of hospitals (public and private), a different analysis is required for each

‘Although Georgia Courts have so far refused to find that medical staff bylaws are an integral part of the hospital/medical staff contractual relationship, they have nevertheless recognized that the medical staff bylaws can be enforced against both private and public hospitals. 9

hospital. However, he assures you that both must do more than merely send you a notice of termination.

With respect to the *public* hospital, you are ensured certain due process protections under the United States and Georgia Constitutions, including, among other things, the right to notice of the action, the right to respond to your accuser, etc.¹ (The specific *constitutional* due process rights may differ

from those contained in the medical staff bylaws.) On the other hand, since *constitutional* due process claims only apply to actions of governments (and quasi governmental entities such as a hospital authority hospital), the due process clauses of the United States and Georgia Constitutions do not apply to the *private* hospital and you do not have the same *constitutional* due process rights as at the public hospital.² However, under the most recent Georgia cases, an action can be brought against *both* public and private hospitals for failing to follow the due process and fair hearing provisions *contained in the medical staff bylaws*.

Georgia Courts and Hospitals — Public and Private

Relief against hospitals for arbitrary privilege termination is often sought (in Georgia as well as across the country) on the basis that the hospital has breached its “contract” with the physician by failing to follow the provisions in the medical staff bylaws. Courts in the majority of states addressing this issue agree that medical staff bylaws are part of the contractual relationship between the medical staff and the hospital.³ A recent example is the decision from the Supreme Court of Tennessee, *Lewisburg Community Hospital v. Alfredson*.⁴ After a dispute concerning Dr. Alfredson’s exclusive contract with the hospital, the hospital proposed to pre-

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vent Dr. Alfredson's access to the hospital's equipment and support staff. The *Alfredson* Court held that the medical staff bylaws are an integral part of the relationship between the hospital and the members of the medical staff. The Court went on to state that to suggest that the hospital has no legal duty to follow its own bylaws would be to reduce the bylaws to a "meaningless mouthing of words." While courts in some states have failed to categorize medical staff bylaws as a contract, *Alfredson* seems to provide the more thoughtful and accurate view.

“Relief against hospitals for arbitrary privilege termination is often sought on the basis that the hospital has breached its “contract” with the physician by failing to follow the provisions in the medical staff bylaws.”

In the past, Georgia courts have reviewed cases involving termination of staff membership or clinical privileges without specifically discussing whether or not the medical staff bylaws were a contract.⁵ Instead, these cases usually focused on whether or not the physician had been wrongly deprived of a property right. These cases often assumed that since the hospital is charged by the State of Georgia with ensuring that an adequate competent medical staff serves the patients within the hospital and since that process is documented in the medical staff bylaws, then the physician must have had no

“expectation” or “bargain” in the relationship with the hospital. As discussed below, such an assumption is unwarranted.

In February of this year, the United States District Court in the Northern District of Georgia decided the case of *Robles v. Humana Hospital-Cartersville*.⁶ After having his privileges revoked by this private hospital, Dr. Robles brought an action claiming breach of contract for the hospital failing to comply with the medical staff bylaws during the investigation that led to the revocation of his staff privileges. The *Robles* Court held that the medical staff bylaws did not include all of the legal elements of a contract and thus struck down Dr. Robles' breach of contract claim. However, the Court went on to hold that *the hospital must follow the procedures that it creates in the medical staff bylaws and that as a result the medical staff bylaws are judicially enforceable*. While reaching the correct practical result (forcing hospitals to abide by due process and fair hearing provisions of the medical staff bylaws), the Court reasoned that the bylaws did not amount to a technical, legal contract because there was no “consideration,” a necessary element to a contract in Georgia. (Consideration is the mutual exchange of something of value.) Similar to the reasoning in some earlier Georgia cases, the Court stated that since the hospital already had the obligation to create the bylaws and develop a procedure for reviewing the physician's competency, the hospital was not agreeing to do anything in the bylaws that it did not already have an obligation to do.

The analysis in *Robles* is highly suspect: Although it is true that hospitals are required to approve bylaws of the organized professional staff,⁷ typical medical staff bylaws contain many obligations and

rights (on the part of both parties) that are not specifically required by law to be included in those bylaws. For example, hospitals typically agree to provide staff members certain specific due process rights, to hear recommendations from the medical staff on issues such as quality improvement, to provide members of the medical staff access to facilities, etc. By the same token, members of the medical staff agree to carry specific levels of liability insurance, to attend meetings, to assist the hospital in maintaining its accreditation and licensure, etc. These agreements are not mandated by law. To the contrary, they are *contracted* to between the hospital and the organized medical staff. Nonetheless, the *Robles* Court dismissed the physician's specific claim based on breach of contract.

“Typical medical staff bylaws contain many obligations and rights (on the part of both parties) that are not specifically required by law to be included in those bylaws.”

The most recent Georgia case involving the question of whether or not medical staff bylaws are a contract was decided in July of this year in *St. Mary's Hospital of Athens, Inc. v. Radiology Professional Corp.*⁸ In *St. Mary's*, a private hospital terminated a physician's privileges concurrently with its termination of a contract with the physician's professional corporation. The *St. Mary's* Court held (without analysis) that the medical staff bylaws were not a contract and, like the *Robles* Court, struck down the breach of contract claim. However, the Court noted that when state law

requires a person to perform an act for the benefit of another, the injured party may recover for the breach of that legal duty if he suffers damage thereby. The Court held that since Georgia law requires all hospitals to enact staff bylaws, *the hospital has a legal duty to follow the procedures established therein.*

The *St. Mary's* Court pointed out that a physician has no absolute right to practice in a given hospital, but it noted that the physician is entitled to continue to practice in the hospital as long as he complies with applicable laws, rules and regulations, and such privileges may not be deprived by rules or acts that are unreasonable, arbitrary, capricious or discriminatory. The Court

went on to hold that *the hospital cannot refuse to follow its existing bylaws.*

Conclusion

The *Robles* and *St. Mary's* decisions have placed Georgia in the minority view with respect to the contract/no contract issue. However, in our scenario, you would be entitled to relief against both hospitals. Courts will, at a minimum, require hospitals to abide by the existing medical staff bylaws. Although Georgia Courts have so far refused to find that medical staff bylaws are an integral part of the hospital/medical staff contractual relationship, they have nevertheless recognized that the medical staff bylaws can be enforced

against both private and public hospitals — and they are more than a “meaningless mouthing of words.”

Notes

1. U.S. Const. amend. V, XIV, Section 1; Ga. Const. Art. I, Section 1. (In addition, O.C.G.A. 31-7-7(b) requires a public (but not private) hospital to send to the practitioner within ten (10) days of the hospital taking action a written statement listing the hospital's reasons for terminating the privileges.)
2. *St. Mary's Hospital of Athens, Inc. v. Radiology Professional Corp.*, Case No. A92A0237, July 8, 1992.
3. *Lewisburg Community Hospital v. Alfredson*, 805 S.W.2d 756 (1991) (and cases cited therein);
4. *Id.*
5. See, *Northeast Georgia Radiological Associates, P.C. v. Tidwell*, 670 F.2d 507 (1982); *Todd v. Physicians & Surgeons Com. Hosp.*, 165 Ga. App. 656, 302 S.E.2d 378 (1983); *Stein v. Tri-City Hosp. Auth.*, 192 Ga. App. 289, 384 S.E.2d 430 (1989).
6. *Robles v. Humana Hospital-Cartersville*, 785 F. Supp. 989 (N.D. Ga. 1992).
7. Section 290-5-6.01, Rules and Regulations of the State of Georgia, Official Compilation.
8. *St. Mary's*, Case No. A92A0237.

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Getting Paid for Your Hospital Work

Gary Matthews

RECENTLY, most medical practices have focused substantial attention on maximizing reimbursements for in-office services and procedures. They have developed practice-specific superbills, purchased state-of-the-art computer and information management systems, invested in training their office staffs, and developed policies which emphasize payment at time of service.

But now that focus on in-office service reimbursements is not enough. Reduced revenues have created the need for medical practices — particularly procedurally oriented specialties — to broaden their perspective on maximizing reimbursement by focusing on services and procedures performed outside the office as well as inside.

Develop A New Mindset

For many physicians, the first step toward maximizing hospital reimbursement is to develop a new mindset. This includes a conscientious effort to code every service or procedure performed in the hospital. At first, this may be difficult because many physicians have traditionally not charged for many legitimate services provided in the hospital. In today's medical practice economy, however, "giving" these services away is just too costly.

Become Educated

The next step toward maximizing

‘The first step toward maximizing hospital reimbursement is to develop a new mindset. This includes a conscientious effort to code every service or procedure performed in the hospital.’

reimbursement for hospital services is to become knowledgeable. Codes are specifically oriented to office/outpatient, hospital, consultations, critical care, and emergency services, and reimbursement varies widely for these different services. Therefore, physicians should know, or quickly learn, which code is most appropriate for services rendered.

Often, physicians apply improper codes for hospital services. As an example, a physician may see a patient in any setting, but if the care rendered is "critical care," an ICU setting is not required. Physicians must relate their coding to the level and intensity of service provided — and the medical record documentation absolutely must support the code level charged.

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This article was prepared at the request of the *Journal*. Those wishing to contribute articles to the Section should submit them to the *Journal* office.

Physicians should become familiar with the new global surgical packaging. Medicare has designated a specific number of pre-op and post-op days when related services are included in the surgical fee. Services unrelated to the surgery should be charged additionally, but with specifying diagnoses. If physicians don't know the coding parameters of their particular surgical specialties, they stand to lose thousands of reimbursement dollars. For example, if a patient is hospitalized for gallbladder removal, the physician must understand the parameters of the gallbladder surgical package. If, during postoperative care, a decubitus ulcer develops in this patient, the physician must recognize that the treatment of this ulcer does not fall within the cholecystectomy surgical parameters. In order to be reimbursed for services associated with treating this ulcer, the physician must document the decubitus ulcer as the diagnosis supporting the services charged.

Obstetric care is another example. Typically, obstetric services are reimbursed on a global package basis which includes regular check-ups with specifically defined components, delivery, and postpartum care. If a patient develops diabetes, however, the additional lab work, check-ups, and care necessary to appropriately treat this patient will not be reimbursed unless a second diagnosis is made and documented.

Become Pro-Active

In the past, physicians have relied on their office staffs to capture hospital charges. These staff members have relied on the information received from hospitals — primarily face sheets, admitting diagnosis, and discharge summaries — to code and capture charges for services performed. In addition to leaving the medical practice vulnerable to errors made by hospital employees concerning how, when, where and why patients were admitted, several other drawbacks to this approach exist.

Physicians must relate their coding to the level and intensity of service provided — and the medical record documentation absolutely must support the code level charged. 9

Face sheets generally include only demographic information. They don't describe what services have been performed. Therefore, practice staff members must either personally track down the appropriate physician to obtain the service information, or they must go to the hospital and research the patient's medical record. Both options create time delays which postpone billing and ultimately create cash flow problems.

Relying strictly on admitting diagnosis also creates problems. Many times, documented physician services don't correspond to the admitting diagnosis. This occurs most often when physicians fail to document a secondary diagnosis for which these services are appropriate. When secondary diag-

noses are not documented and linked with specific procedures, the clinically untrained employees may not know how to code the seemingly inappropriate services and ultimately end up down coding, or not coding them at all.

Discharge summaries create similar problems. Clinically untrained practice employees cannot accurately translate discharge reports into the most accurate ICD-9 and CPT codes which again may result in substantial downcoding and subsequent reimbursement reductions.

Physicians can eliminate the majority of these problems by taking the following proactive steps.

1. Develop a Hospital Charge Ticket. This ticket is the most important component to ensuring timely and accurate hospital reimbursement.

The ticket, which can be a 5" x 7" index card or an 8 1/2" x 11" sheet of paper, should be an edited version of your medical practice's superbill. It should include the ICD-9 and CPT codes most frequently used by your practice physicians during hospital visits, plus extra space to note additional procedures. The specific code list can be developed through a computer generated production analysis report of the codes used in your practice during the previous year.

On a daily basis, physicians should complete these tickets for each patient seen in the hospital by circling the appropriate ICD-9 and CPT codes for services provided. Physicians should carry additional blank forms to ensure charge capture of "on the fly" consults, emergency room work, and other unexpected procedures. Once these tickets are completed, physicians should present them to the business office where they are immediately entered into the billing system

so the third-party payment process can begin.

Using these customized charge tickets has several advantages. They ensure accuracy because the physicians themselves determine the coding. They save time because they eliminate the dependence on hospital-provided information. And, they improve billing, collections and cash flow because they expedite the third-party payment process.

2. Develop Daily Checks and Balance System. Physicians must take primary responsibility for initiating and completing charge tickets — for their own patients and for consult patients as well.

To help ensure accuracy and success, a business office employee should be assigned the responsibility of double checking the information on every hospital patient receiving care from your practice physicians. Have this employee compare the hospital charge tickets with hospital daily census sheets. If a patient appears on the daily census sheet but a hospital charge ticket does not exist, the employee should find out why and, if appropriate, generate a new charge ticket for the physician to complete.

If physicians don't know the coding parameters of their particular surgical specialties, they stand to lose thousands of reimbursement dollars. 9

This employee should also receive copies of all hospital face sheets, postoperative notes, discharge summaries, and consultation reports. This information should be used on a daily basis to

ensure that all patients have been identified and that all services provided have been captured.

If any question arises, this back-up information should be presented to physicians with a request that they check off the appropriate level of care. Physicians should not relegate the selection of visit level to business office personnel since the physician is the only one who can determine the complexity and extent of the encounter. Relying on office staff to determine appropriate level of care can put physicians at considerable risk for fraudulent claims and post-payment audits.

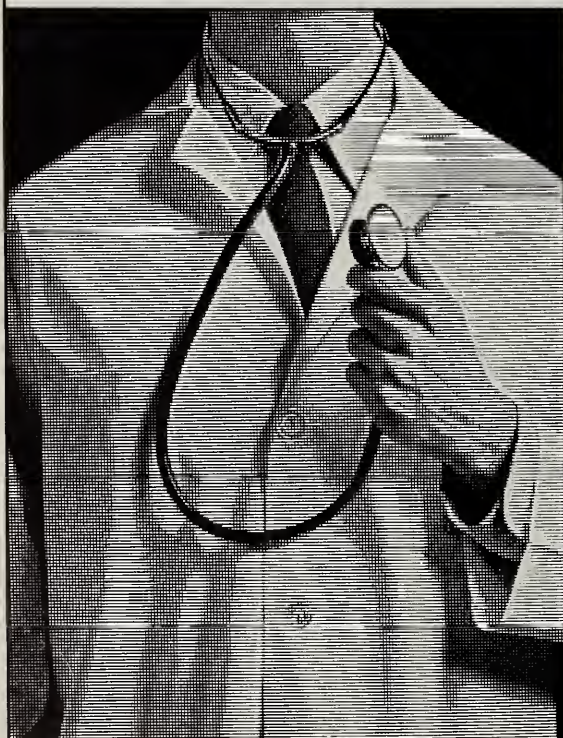
3. File Claims Promptly. File claims within 72 hours of services being performed — or daily if justified. Heavy third-party intensive specialties such as cardiovascular, neurosurgery, or orthopedic surgery justify daily posting and filing of claims. Less intensive specialties such as pediatrics, dermatology, or allergy should file claims within 72 hours — or weekly at a minimum.

4. Don't Wait for Patient Discharge Reports. Bill on a timely basis — especially for hospitalized patients for whom you have been providing daily care for an extended period of time. Such timely billing will not only improve cash

flow, it will also create less risk of services being denied as outliers. Four weekly bills submitted for \$700 each will be less likely to be targeted for review by third party payers than a single bill for \$2800.

Implementing this proactive approach to hospital reimbursement will help ensure a healthy financial future for your practice by improving charge accumulation, cash-flow, and reimbursement revenues. This has always been true, but under RBRVS & Physician Payment Reform, optimizing hospital reimbursement is crucial.

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ARMY MEDICINE. BE ALL YOU CAN BE.

Physician Contracts: HMOs, PPOs, and Hospital-based Physicians, Exclusive Contracts and Employment

Edward B. Hirshfeld

Approach for Evaluating Contracts

THE APPROACH for evaluating a contract has two steps. First, evaluate the economics of the "deal" being offered. One has to evaluate the economics of the proposal that is being offered, and whether the essential "deal" is acceptable. To make this evaluation, it is important to have a good understanding of one's own practice and a good understanding of the type of activity involved in the proposed contract. That kind of knowledge is necessary to make good judgments about the economic benefits and liabilities that would result from entering the contract. If you do not have that kind of knowledge, it is important to acquire it through reading or hiring consultants.

Evaluating the economics of a proposed deal is the most important part of contract evaluation, and it is more a business, as opposed to a legal, function. Lawyers often perform many aspects of this business function for their clients because they have developed ex-

Evaluating the economics of a proposed deal is the most important part of contract evaluation, and it is more a business, as opposed to a legal, function. . . . Lawyers can help evaluate the business aspects of a deal, but you should be able to make a thoughtful evaluation yourself.

perience in the business aspects of contracting as a result of having participated in many negotiations.

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This paper was presented at a seminar sponsored by MAG on "The Law and the Physician — Medical-Legal Issues Affecting Medical Staffs and the Practicing Physician," July, 1992, at Amelia Island, Florida.

In addition, lawyers have seen disputes arise over contracts and have some experience in what has gone wrong for physicians as a matter of economics. However, the physician is better off if the physician makes the effort to understand his or her own practice and is able to think through the impact of the proposed deal. Lawyers can help evaluate the business aspects of a deal, but you should be able to make a thoughtful evaluation yourself.

Second, evaluate whether the contract accurately describes the proposed deal. The basic deal being offered will be explained to you in a summarized format, whereas the contract may go on for page after page. Therefore, it is important to evaluate whether the contract accurately describes the deal that is being offered to you. This is in large part the job of your lawyer, but you can discover a lot by performing your own evaluation.

Normally, the skeletal terms that are offered to you will be accurately described in the contract. The key is to ferret out the terms that indirectly impose costs — such

as complying with burdensome utilization review procedures in a contract with a managed care entity — that are not accounted for in the basic economic terms offered to you. It is also important to ferret out terms that provide for contingencies that, if exercised, might impose costs or liabilities that could materially alter the economics of the deal. In addition, it is important to identify the terms that limit the physician's flexibility to escape a contract that has unexpectedly become onerous or to prevent the loss of a valuable contract.

Contracts With Managed Care Entities

Managed care entities include HMOs, PPOs, and many other types of payers that use managed care techniques, such as certain self insured employers, indemnity plans, government sponsored health plans, and others. The term is now used to describe any payer that restricts patient choice, restricts the providers that may participate in the payer's health care plan, or engages in some kind of utilization review or other features designed to control the provision of health care for the purpose of limiting costs.¹

Economic Considerations

Managed care programs normally use the lure of patient volume to induce the physician to accept discounted fees, such as a fee withhold program based on utilization, capitation, or some other type of concession or risk sharing arrangement. The issue for the physician is whether the volume offered is worth the concessions demanded.

In order to make that assessment, the physician must be aware of the costs of the physician's practice. An understanding of costs is necessary to judge whether it will be profitable to treat the patients at a discounted fee or capitated rate. However, understanding costs is just a start. Usually, determining profit-

ability is more complex than multiplying the number of patients times the expected fees or capitation rates and subtracting practice costs. Other issues to consider are as follows:

It is important to identify the terms that limit the physician's flexibility to escape a contract that has unexpectedly become onerous or to prevent the loss of a valuable contract.

1. What kind of payment and incentive scheme is being offered? There are two basic kinds of payment schemes: (a) fee for service and (b) capitation. Some plans are "hybrids", meaning that they require capitation for some services but allow fee for service reimbursement for services outside a certain scope of coverage. It is typical for plans that rely on capitation to require capitation for primary care "gatekeepers" and fee for service payments for specialists who receive referrals from the gatekeepers.

Fee for Service

Fee for service payment schemes usually involve a discounted fee schedule plus fee withholds. The discounted fee schedule might not be based on discounts from the physician's own fee schedule; it might be based on a schedule independently generated by the managed care organization. Fee withholds are paid to the physicians if utilization targets are achieved. The incentive offered for discounting fees is patient volume. In addition to matters such as the size of discounts demanded and the size of

fee withholds, questions to ask about fee for service payment schemes include the following:

- What services are intended to be included in a billable event? In particular, will ancillary services such as laboratory services be paid for separately, or must they be included in a global fee?
- Is the physician permitted to perform ancillary services such as x-rays and laboratory tests, or are they sent out to another entity that the managed care organization has contracted with?
- How stringent are the utilization criteria used by the plan, and when are they applied? Is it likely that a lot of claims will be retrospectively denied? Who performs the utilization review, and who has the final say over whether a service will be performed? What procedures are available for a physician or a patient to challenge a decision not to pay a claim?
- How soon after submission are claims paid?
- How often are fees updated, and what is the update mechanism?
- What actuarial methods were used to set utilization targets? Are the targets realistic given the actual characteristics of the beneficiaries of the managed care organization? Was national data or local data used?

Capitation Systems

In a capitation payment scheme, the gatekeeper physician is paid a predetermined amount for all patients that select or are assigned to that physician as the gatekeeper. Part of the capitation rate may be withheld and paid if utilization targets are met. Another pool is created to serve as the funding for referrals to specialists, who are normally paid on a fee for service basis. There may also be a pool for payments to hospitals. Under capitation, physicians are subject to the risk that patients may require more of their time and resources than the

physicians are paid pursuant to the capitated rate. They may also be at risk for payments made to specialists that exceed the pool assigned to pay for referrals to specialists. Usually "stop loss" provisions limit the amount of risk undertaken by the gatekeeper. In addition to matters such as the amount of capitation, the stop loss level, and the amount of withholds, questions to ask include:

- What services is the physician required to provide in return for the capitated amount? It is important to determine the benefits that the beneficiaries of the managed care entity are entitled to obtain. Often the list of benefits is not set forth in the contract with the physician. Instead, the physician's contract refers to the schedule of benefits in the contract between the managed care organization and the beneficiary. It is important for the physician to obtain and review the schedule of benefits in determining whether the amount of capitation is adequate.
- What actuarial methods were used to develop the capitation amount, the withholds, the pools for specialists and hospital payments, and utilization targets? This issue is critical under capitated systems, as the actuarial calculations are the basis for the capitation amount. If the actuarial calculations are in error and understate the amount of health care likely to be consumed by the beneficiaries of the managed care entity, then the physician will probably lose money on the contract. Actuarial calculations may be based on national data, while there may be some demographic variations in beneficiary population that are different from the national data.
- How adequate are the mechanisms designed to "cap" or limit the physician's risk? How many high cost patients can be absorbed before the physician

starts to lose money? Sometimes even one high cost patient can cause this to occur. How are beneficiaries assigned to the physician, and does the method of assignment cause any biases in the type of patient assigned? This issue is important because the actuarial calculations on which the capitation amounts are based assume that patients will be assigned randomly, and that high cost patients will be offset by low cost patients. The physician needs to find out whether the method of assignment will result in more high cost patients than would be assigned randomly.

- What cost sharing procedures apply to beneficiaries, and have their effects been taken into account in the actuarial calculations? Beneficiaries who are not required to pay deductibles or copayments are likely to consume more resources than beneficiaries who must make a payment.

Why enter into a contract with a hospital at all? The physician should have clear economic goals that make a contract with the hospital worthwhile.

- What kind of utilization data are provided to the physician during the course of the contract? The physician must know how the rate of utilization is affecting withholds, pools for funding specialty care and hospital care, and other matters. The data must be timely and accurate. What opportunity does the physician have to review the data upon which decisions to pay or not

pay withholds are based? The physician should have an opportunity to check the analysis done by the managed care organization.

2. What new administrative procedures must be complied with under the proposed contract and what are the costs? Utilization review procedures, especially prospective review procedures, may take a lot of physician time and office staff time. It may also be necessary to generate other types of reports.

3. How will the requirements affect the physician's practice style and office organization? The pressures of capitation may cause the physician to find ways to reduce the time spent on each patient, for example. The contract may cause increased use of some services, such as those involving preventive medicine, and less use of ancillary services such as x-rays and laboratory services.

Legal Considerations

As stated earlier, the issue here is to ferret out contract provisions that may materially alter the "deal" as presented to the physician, in particular terms that may impose costs or the risk of liabilities. In addition, terms that may prevent the ability of the physician to escape the contract or that prevent the physician from stopping the cancellation of the contract should be reviewed.

Terms That May Alter the Economics of the Deal

Some of the ways in which contract terms may result in unexpected changes in the economics of the deal are as follows:

- Terms which give the managed care entity the discretion to determine important matters. For example, the contract may require the physician to accept as full payment the fee schedule developed by the managed care entity, and also give the entity discretion to change the fee

schedule. The contract may require the physician to comply with the rules of operation, utilization review procedures, and utilization review criteria of the managed care entity, and also give the entity authority to change those rules, procedures, and criteria. The managed care entity may be given discretion to change the schedule of benefits that must be provided to beneficiaries. While the managed care entity needs a certain amount of discretion in some of these areas for the sake of efficiency, the physician needs assurance that changes will not have a material adverse effect upon the physician's finances. At a minimum, the physician should be provided written notice of changes and have the opportunity to cancel the contract if the changes have a material adverse effect upon the physician.

- Terms which incorporate documents by reference. Sometimes a contract will refer to a fee schedule, schedules of benefits, rules of operation, utilization review procedures, and utilization review criteria, but those matters will be contained in a separate document. The physician should obtain them and review them to be certain that they do not impose costs that materially affect the worth of the contract. Usually the contract gives the managed care entity the discretion to change these documents. As mentioned above, the physician should, at a minimum, be given written notice of changes and an opportunity to cancel the contract if the changes have a material adverse effect.
- Lists of definitions in contracts describe exact meanings for key words used in the contract document. The definitions should be reviewed because they may not be the same as the physician's understanding of the words. Definitions can have a *material* effect

on the economics of the contract.

- Terms which shift liabilities to the physician. For example, the contract may require the physician to indemnify the managed care organization for any claims against the organization arising out of the physician's treatment of beneficiaries. Such claims may be based on the managed care organization's selection of the physician or on the incentives or utilization review criteria applied by the entity. The typical physician malpractice insurance policy does not cover such claims. The contract may also require the physician to engage in peer review of other participating physicians. Those activities can result in lawsuits that may not be covered under the physician's malpractice policy.

Terms Which Affect Escape From and Loss of the Contract

The physician should know whether the physician can cancel the contract or prevent cancellation if the contract proves to be valuable. A contract with a managed care entity is a contract for personal

Exclusivity is a tremendous benefit for the contracting physician, but there is an important legal concern—the antitrust laws.

services. Legally, therefore, the contract cannot be enforced if the physician decides not to perform. Although the managed care entity could not compel the physician to perform, it could sue the physician for damages caused by the nonperformance. Some of the contract provisions which affect the viability of the contract are as follows:

- Term of the contract. A provision of the contract will list a term for which the contract is expected to be in force.
- Term renewals. A provision of the contract will state the procedures to follow or options available for renewal. Some contracts provide that the contract is automatically renewed each year unless the parties take action to cancel it.
- Cancellation for cause. The physician will want to be able to cancel the contract if, for example, the managed care organization is late in paying claims or fails to deliver the promised volume of patients. Optimally, the reasons for cancellation should be spelled out in the contract. The contract will also specify reasons why the contract can be cancelled for cause by the managed care organization. The physician may want a procedure specified in the contract about how to challenge a termination for cause.
- Cancellation without cause. Contracts often allow either party to cancel without cause provided that a certain amount of notice is provided. The physician should decide whether such a provision is desirable.
- Allocation of liabilities after termination. The physician has a common law obligation not to abandon patients. The contract should specify how patient care will be provided and paid for in the event that a patient needs ongoing care after contract termination. In addition, the contract should specify when final payments will be made for services performed up to the time of termination.
- Assignment. The managed care organization may merge or sell its portfolio to another organization. The contract may allow the managed care organization to assign the contract with the physician to the new entity. The physi-

cian may want the ability to terminate the contract if the assignee is not to the physician's liking.

Hospital Contracts

There is a myriad of different types of contractual agreements between physicians and hospitals. This section will discuss contractual arrangements that obligate the physician to perform medical services at the hospital. It will not consider joint venture contracts, physician recruitment contracts, or contracts to purchase a physician's practice.

Physicians can contract with a hospital to provide services as employees (in states where the corporate practice of medicine is not a bar) or as independent contractors. The first question to ask is why enter into a contract with the hospital at all. The physician should have clear economic goals that make a contract with the hospital worth while. The second question to ask is whether to contract as an employee or as an independent contractor. Some considerations are set forth below.

Economic Considerations

The primary reasons for contracting with a hospital are security and convenience. The "hospital based" specialties in particular would like to be assured a flow of referrals, and physicians in other specialties also might like the security of a salary or a stream of patients referred by the hospital.

Employees

A physician who becomes an employee of the hospital loses autonomy and control. The hospital has more ability to direct the activities of an employee than an independent contractor. Indeed, one of the tests for distinguishing between employees and independent contractors is the extent to which the activities of the physician are being directed by the hospital.

However, an employee gains certain legal protections that an independent contractor does not have. These vary from state to state, but generally include protections against discrimination on the basis of race, religion, national origin, age, sex, and disability. There are also laws that regulate vacation time, benefits, working conditions, and many other matters. In addition, emerging case law may protect employees against unreasonable or arbitrary discharges.

The physician should determine the scope of services required to be provided under the contract, the times of coverage, and the patients required to be covered.

Independent Contractors

An independent contractor retains a substantial amount of economic and operational autonomy. Independent contractors can bill patients for their services as opposed to being compensated by a salary. They also have more discretion to practice according to their own work rules as opposed to the rules of the hospital. However, particularly with tax exempt hospitals, independent contractor status can introduce some complexities. For example, there are rules against "private inurement" and other uses of hospital funds to benefit private interests. These rules can affect the arrangements between independent contractors and hospitals in surprising ways.

Legal Considerations

There are a variety of terms which can affect the value of a contract or affect important economic rights. They include:

- **Exclusivity.** The issue here is whether the physician or the physician's group should have the exclusive right to perform services at a hospital. Exclusivity is a tremendous benefit for the contracting physician, but there is an important legal concern — the antitrust laws. Numerous exclusive arrangements have been challenged by physicians or limited license health care professionals that have been shut out of the hospital as a result of the arrangement. Almost all of these challenges have failed. However, a few have succeeded. Challenges can succeed when there is an underlying anticompetitive reason for the arrangement that does not involve legitimate concerns about quality. In particular, the courts are receptive where an exclusive arrangement has been forced on a hospital that was not looking for one, or where the hospital is using the exclusive arrangement to leverage its own monopoly over a service. In evaluating whether an exclusive arrangement is legal, it is important to consider whether the legitimate business reasons of the hospital are the motive for the contract or some other purpose.
- **Mutual exclusivity.** The hospital may want the physicians to perform exclusively at the hospital in return for giving them exclusivity. This also raises antitrust concerns, as there may not be a large enough volume of patients to enable a competing hospital to attract another physician in the same specialty. Again, the motives for the arrangement must be reviewed carefully.
- **Duration of medical staff privileges.** A major concern is whether medical staff privileges of the contracting physician will survive termination of the contract. This should include whether or not the physician will have access to the equipment

and support staff necessary to perform the physician's specialty after termination. The hospital will normally want the ability to terminate privileges or access to equipment and support staff so that it can enter into another exclusive arrangement. The physician will typically want the option of being able to continue practicing at the hospital, particularly if loss of privileges would mean being forced to relocate. Your privileges are extremely valuable. *Physicians should always consult an attorney before agreeing to automatic termination of privileges.*

- Termination of the contract. The hospital may want a contract that is terminable at will with a certain period of notice, such as 60 or 90 days. That gives the physician very little security. Physicians can counter this with provisions that allow termination only for cause or, at a minimum, provide a lengthy notice period.
- Effect of contracts between the hospital and managed care contracts. The hospital may want provisions that require the physician to treat patients of a managed care organization according to the terms and conditions agreed to by the hospital. This is not a concern of employed physicians, but it eliminates the economic autonomy of the independent contractor. The physician will want to retain the right to enter independent contracts with managed care entities.
- Coverage obligations. The physician should determine the scope of services required to be provided under the contract, the times of coverage and the patients required to be covered. Re-

quiring coverage of indigent patients for whom no payment will be available must be factored into considerations about the value of an exclusive relationship.

The hospital may want a clause that prohibits the physician from practicing in competition with the hospital after termination. These agreements are valid if reasonable in duration and space.

- Hospital administrative obligations. The physician should evaluate any administrative obligations that the contract requires. Administrative activities can be very time consuming.
- Liability. Employed physicians will want the hospital to provide malpractice insurance, and to indemnify them for any claims brought against them. An important issue is responsibility for the physician's "tail" insurance if the employment contract is terminated. The physician should ask the hospital to pay for the value of a tail policy that covers the period of the physician's employment at the hospital. Independent contractors should avoid clauses that hold the hospital harmless for any claims brought against them, including antitrust claims. Also, the hospital should provide coverage for

peer review and other administrative activities that physicians perform, and should agree to indemnify the physicians for any amounts not covered by the hospital's policy.

- Hospital obligations to provide equipment and support personnel. The physician should ask for provisions which set forth the hospital's obligation to provide adequate equipment and support services to enable the physician to practice.
- Noncompete provisions. The hospital may want a clause that prohibits the physician from practicing in competition with the hospital after termination. These agreements are valid if reasonable in duration (usually one to two years) and in space (typically within one to ten miles of the hospital). States vary on what is considered "reasonable," and a few states bar noncompete agreements. The contracting physician will want to avoid these clauses, because even one that lasts for a short period and applies to a limited area can effectively force the physician to relocate after contract termination.

References

1. For more detailed information about contracting with managed care entities see the Physician's Survival Guide, Legal Pitfalls and Solutions, Chapter 8, "Analyzing and Negotiating Managed Care Agreements", by James B. Weiland, J.D., and Robert A. Berenson, M.D., produced by the American Medical Association and the National Health Lawyers Association. This publication is available from the AMA (800-621-8335). See also the Physician's Contracting Handbook by Elizabeth Snelson, J.D. This book was designed for California physicians, but is a useful guide for physicians in other areas as well. It can be obtained from the California Medical Association by calling Aynah Askanas at 415-882-5164.
2. For additional details, see chapter 9, "Contracts Between Physicians and Hospitals", by Dale Cowan, J.D., in the *Physician's Survival Guide* mentioned at the end of the last section.

Peer Review, Hearing Requirements, and Antitrust: Maximizing Federal Health Care Quality Improvement Act Compliance and Immunity

Elizabeth A. Snelson, J.D.

SIX YEARS AGO, Congress enacted legislation which was intended to help physicians perform peer review. Like so much else in life, this assistance is not a free lunch. The immunities from anti-trust and other liabilities must be earned by meeting certain technical requirements. Earning the protection is not difficult but requires that medical staff procedures are drafted accordingly.

Despite the relative ease of revising medical staff peer review procedures, many medical staffs have failed to do so. Excuses vary, but frequently cited is the rationalization that the hospital is too preoccupied with other issues to see that the medical staff bylaws get tuned up. If the medical staff has taken the initiative to seek revisions to its bylaws, often it meets with delays from the hospital counsel, whose priorities are those of the hospital rather than the medical staff. Given the importance of antitrust protection in these increasingly litigious times, medical staffs should take the initiative regarding their own bylaws and seek their own legal

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counsel to see that the medical staff's interest in providing fair procedures designed to protect the medical staff and its members are implemented.

This article will provide a brief overview of the Health Care Quality Improvement Act. The article will

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This paper is based on a presentation made by Ms. Snelson at a seminar sponsored by MAG, "Medical-Legal Issues Affecting Medical Staffs and the Practicing Physician," July, 1992, in Amelia Island, Florida.

focus on the notice and hearing standards established in the federal law which could cost the medical staff and its members their immunities.

The Health Care Quality Improvement Act of 1986

The federal Health Care Quality Improvement Act ("HCQIA") was enacted by Congress to encourage physicians to conduct peer review and to promote quality patient care. The HCQIA provides that encouragement in the form of a legal shield against challenges by those adversely affected by peer review, who had increasingly resorted to suing the peer reviewers in federal court alleging violations of antitrust law.

Under the HCQIA, "if a professional review action of a professional review body meets all the standards specified . . . the professional review body, any person acting as a member or staff to the body, any person under a contract or other formal agreement with the body and any person who participates with or assists the body with

respect to the action, shall not be liable in damages under any law of the United States or of any State (or political subdivision thereof) with respect to the action."¹

The HCQIA's protection is conditional, however. In order to win the immunity the peer review action must meet the HCQIA's "good faith" standard, which states that the action must be taken:

1. In the reasonable belief that the action is in the furtherance of quality health care
2. After a reasonable effort to obtain the facts of the matter
3. After adequate notice and hearing procedures are afforded to the physician involved or after such other procedures as are fair to the physician under the circumstances
4. In the reasonable belief that the action was warranted by the facts known after such reasonable efforts to obtain the facts and after meeting the requirements of paragraph 3.²

The law does presume that these good faith standards have been met but allows a physician who has been reviewed to rebut that presumption. If the physician is successful in proving that the peer review action was taken for anti-competitive reasons or the result of malice or otherwise was not taken in good faith, the immunity offered by the HCQIA is shattered.

Adequate Notice and Hearing

The third requirement of good faith peer review under the HCQIA requires that the medical staff provide adequate notice to the physician under review and afford that individual fair hearing procedures. The HCQIA goes on to define the requirements for notice to be considered adequate and for hearing procedures to be considered fair, by establishing a "safe harbor."

If the notice and the hearing procedures fall within the standards of the HCQIA, they are automatically

deemed to be sufficient. The HCQIA does not absolutely require that every procedure meet each and every one of the requirements in the Act. However, if a medical staff's notice and hearing procedure requirements are not consistent with the HCQIA, the medical staff will have to prove that its notice and procedure were nonetheless fair.

As a practical matter, medical staff procedures which meet the minimum standards of the HCQIA may allow the medical staff members involved in the process to win a legal challenge at an earlier point in the litigation than would otherwise be possible if the fairness of the medical staff procedures had to be proved in a full trial.

The HCQIA safe harbor is as follows:

1. Notice of Proposed Action. To start the process going, once a medical staff has determined that it will propose to the Board of Trustees to deny an application, revoke privileges, or otherwise take actions adversely affecting a physician's privileges or membership, the physician must be given notice stating:

- That a professional review action has been proposed,
- The reasons for that proposed action,
- That the physician has the right to request a hearing on the proposed action,
- Any time limit, which cannot be less than (30) days, within which the physician is to request a hearing, and
- A summary of the rights afforded to the physician in the hearing.³

While the HCQIA does not require it, it is generally advisable for such notices to be sent certified mail, return receipt requested, so that the medical staff may prove that it provided the notice required.

2. Notice of Hearing. If the physician requests the hearing within the time limit established, the physician is to be sent a second notice, which states:

- The place, time, and date of the hearing, which date cannot be less than 30 days after the date of the notice, and
- A list of any witnesses expected to testify at the hearing on behalf of the medical staff's recommendation to take the adverse action.⁴

3. Conduct of the Hearing. The HCQIA gives a medical staff three options for designing a hearing. Specifically, the hearing can be held:

- Before an arbitrator mutually acceptable to the physician and to the hospital, or
- Before a hearing officer who is appointed by the hospital and who is not in direct economic competition with the physician involved, or
- Before a panel of individuals who are appointed by the hospital and are not in direct economic competition with the physician involved.

The latter option is that which is traditionally set forth in medical staff bylaws, which usually call for a committee to be appointed by the Chief of Staff. Note that the HCQIA technically requires that that committee be appointed by the hospital. Medical staffs may stipulate in their bylaws that the Chief of Staff or the Medical Executive Committee may recommend a group of individuals to the hospital board or administrator, who will make the final appointments. In this way, the medical staff leadership, which should be in a better position to determine who is and is not in direct economic competition with the physician, may still be involved in the selection of the panel. The same mechanism can be utilized if the medical staff chooses to have its hearings held before a single hearing officer.

4. Rights in the Hearing. The HCQIA sets as a fairness standards the following rights for the physicians involved:

- To be represented by an attorney or other person of the physician's choice,
- To have a record made of the proceedings, copies of which may be obtained by the physician upon payment of reasonable charges associated with the preparation of the record,
- To call, examine, and cross-examine witnesses,
- To present evidence determined to be relevant by the hearing officer, regardless of its inadmissibility in a court of law, and
- To submit a written statement at the close of hearing.⁵

Medical staffs that have not updated their hearing provisions to comply with this 1986 law commonly deny the right to individual representation by an attorney. The rationale behind such a denial ranges from the desire to maintain the proceeding as one among peers, to a desire to keep lawyers from squabbling with each other while a panel of physicians is simply trying to get at the truth. However, given the ramifications of an adverse action, particularly as such actions usually must be reported to the National Practitioner Data Bank, the individual physician involved has a great deal at stake, which justifies some inconvenience to others. Of course, the medical staff members involved benefit by complying with the HCQIA and winning its immunity.

5. *Rights on Completion of the Hearing.* Under HCQIA the physician has the right at the completion of the hearing to:

- Receive the recommendation of the arbitrator, hearing officer or hearing committee that heard the matter, which recommendation must include a statement of the basis for the recommendation, and
 - Receive a written decision of the hospital, again, including a statement of the basis for its decision.
- While the HCQIA is silent on the rights of a physician to appeal to

the hospital board or a committee of the board the decision of the medical staff hearing panel, generally, such an appeal mechanism is warranted, to allow a group of non-professionals to review that matter to ensure that procedural requirements were met. That extra layer may also limit the individual's ability to argue that he or she was railroaded out of the medical staff, by including a more remote body to review the situation.

National Practitioner Data Bank

Even though the medical staff has met all the technical requirements of the notice and hearing provision of the HCQIA, it can still lose immunity by failing to comply with the reporting requirements also established under the HCQIA. Under the federal law's terms, the National Practitioner Data Bank was established as a national clearinghouse of information on adverse action taken by hospitals, state licensure boards, and other health care entities, and on malpractice payments. The Data Bank requirements for reporting are complex and replete with loopholes, but essentially require that a hospital report to the Data Bank, via the state medical board, any adverse action which affects a physician's membership or clinical privileges for a period longer than 30 days. Such actions must be reported, using Data Bank forms, within 15 days of becoming final. Failure to report, including failure to provide the information required, as required and within the time frame specified, could cause the hospital to lose its immunities for a 3-year period.

While the sanction for the hospital's failure to report is obviously serious, so are the consequences of being reported. A physician's Data Bank file can be accessed by any hospital at which the physician seeks privileges, by

HMOs and other health care entities meeting the qualifications set forth in the HCQIA, such as certain ambulatory surgery centers, independent practice associations, clinics, and medical groups. The existence of an adverse action in a physician's Data Bank file can thus jeopardize clinical privileges at any facility, third party payor contracts, and employment in almost any professional capacity. It thus behooves a medical staff to take precautions to balance the need to comply with the Data Bank reporting requirements with the medical staff members' need to eliminate needless Data Bank reporting.

The medical staff should also take precautions that information that must be reported to the Data Bank is in fact accurate. The Data Bank report form includes a section in which the basis for the adverse action is to be described in 600 characters, including spaces and punctuation, or less. Thus, administrative personnel may be tempted to oversimplify the rationale for the action taken, or worse, state the basis in needlessly pejorative terms which will remain in the physician's Data Bank file forever. Clinical review of the descriptions should be built into every medical staff's bylaws or protocols.

Adverse peer review actions may arise suddenly, as in the case of summary suspension, or grow gradually but inevitably, as the seeds of needed disciplinary action first begin to become apparent in a committee or department. There is no time like the present to obtain a legal review of medical staff bylaws to ensure that any available protection for medical staff members is built in to medical staff procedures.

Notes

1. 42 USC 11111(a)(1). Actions under state or federal civil rights laws or actions brought by the federal or state attorney general are exempted.
2. 42 USC 11112(a).
3. 42 USC 11112(b)(1).
4. 42 USC 11112(b)(2).
5. 42 USC 11112(b)(3)(c).

THE UNITED STATES ARMY RESERVE HEALTH CARE PROFESSIONALS BONUS TEST PROGRAM

\$10,000 - \$20,000 - \$30,000

The **1989 National Defense Authorization Act** required that the Department of Defense conduct a test to determine the effectiveness of a recruitment bonus to attract health care professionals to the Selective Reserve of the Army. The 1991 National Defense Authorization Act directed that the test continue.

The Bonus Test Program is offered to physicians in the following specialties:

**ANESTHESIOLOGY
ORTHOPAEDIC SURGERY
and
GENERAL SURGERY**
(Including selected subspecialties)

Applicants must be board certified or meet all requirements for board candidacy in one of the above specialties.

BONUS ELIGIBILITY: In addition to meeting all criteria for appointment as a medical corps officer in the US Army Reserve, Bonus Test applicants must be civilians and if prior service, discharged before 28 April 1989.

BONUS AMOUNTS: The test offers \$10,000 bonus for each year of affiliation with the Selected Reserve of the Army, up to a maximum of 3 years. Physicians must choose 1, 2, or 3 years of affiliation at time of application. Bonuses will be paid annually at the beginning of each year of agreed affiliation.

TEST PARAMETERS: The design of the test stipulates that bonuses be offered in certain geographic areas. To qualify, applicants must reside within those areas at the time of accession.

**TO FULLY DETERMINE YOUR ELIGIBILITY FOR THIS PROGRAM
PLEASE CONTACT:**

**U.S. ARMY RESERVE HEALTH CARE TEAM
Building 710, First Floor, Fort Gillem, Forest Park, GA 30050
OR CALL COLLECT: (404) 362-3374 or 5646**

Market Power, Collusion, and Exclusion in Health Care Antitrust Enforcement

James M. Spears

I HAVE BEEN ASKED to describe how the Federal Trade Commission's competition enforcement activities might affect the practicing physician. In describing the Commission's enforcement program, however, I want also to accomplish two broader objectives. First, I would like to establish some context for the Commission's efforts. Consequently, I will talk about how the medical profession became subject to the antitrust laws and spend a few moments examining the Commission's role in enforcing those laws.

My second objective is to suggest an analytical model to use in understanding how the antitrust laws work, both in general terms and as the FTC has applied those laws to health care matters. Despite the extraordinarily complex, and sometimes esoteric, nature of antitrust law and theory, I believe that this model may prove useful in spotting the kinds of unfair competition problems that a physician might encounter.

Before proceeding, however, I must point out that the views I ex-

A comprehensive review of the caselaw would demonstrate that private parties — most particularly, doctors and health care providers — have brought more health care antitrust cases than have state and federal agencies combined.

press are my own, and not necessarily those of the Federal Trade Commission or of any individual Commissioner thereof.

Twenty years ago, I doubt that we would have had much to discuss with respect to "health care antitrust." For the first eighty-five

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This paper was presented at a seminar sponsored by MAG on "The Law and the Physician — Medical-Legal Issues Affecting Medical Staffs and the Practicing Physician," July, 1992, Amelia Island, Florida.

years of federal antitrust enforcement — beginning with the enactment of the Sherman Antitrust Act in 1890 — the practice of a learned profession, such as medicine, law, or engineering, was not considered to be the kind of commercial activity that was subject to the antitrust laws.¹ In essence, for all practical purposes, there was no "health care antitrust."

All of this changed in 1975, however, when the Supreme Court decided *Goldfarb v. Virginia State Bar*.² In that case, which involved a minimum fee schedule established by a county bar association and enforced by the State Bar, the Supreme Court first declared that the practice of "learned professions" is part of the commerce of the United States and therefore subject to the antitrust laws. Having decided this threshold jurisdictional question, the Court struck down the fee schedule in short order.

Many professionals reacted to these declarations with surprise and even consternation. As an historical matter, however, *Goldfarb* reflects the Supreme Court's long-

held view that the antitrust laws are of almost constitutional stature. As the Court stated in 1972:

Antitrust laws in general, and the Sherman Act in particular, are the Magna Carta of free enterprise. They are as important to the preservation of economic freedom and our free-enterprise system as the Bill of Rights is to the protection of our fundamental personal freedoms.

The premise of the antitrust laws is that competition will provide consumers with the most desirable array of goods and services at the lowest prices. The process is simple: in an unfettered market, firms must compete for consumer patronage, and consumers steer that patronage to firms that offer the best values in terms of price, product, service, and convenience. Where competition is stifled, however, the process breaks down. Prices rise, supply decreases, variety diminishes, innovation stagnates, and consumers ultimately bear the brunt of it all.

I recognize that price competition and advertising may often appear crass or unprofessional. As a lawyer who takes pride in his profession, I sometimes wince when a television ad comes on to sell legal services like discount furniture. But I also recognize that advertising and price competition help providers to keep prices down and attract new clients. Indeed, over the past decade and a half, a variety of alternative legal service providers — such as pre-paid legal service plans, chain operations, and others — have found new ways to make legal services more accessible and affordable, particularly for individuals who need routine legal services — such as wills and divorces — and who do not have the wherewithal to keep someone on retainer in Peachtree Plaza. But these salutary developments in the legal profession — which parallel developments in the health care

professions — could not have evolved in the face of such anticompetitive restraints as minimum fee schedules, ethical restrictions on non-deceptive advertising, and prohibitions against contract practice.

While it is a good idea to pay attention to the concerns and priorities of antitrust enforcement agencies, it is even more important for doctors and their medical societies to develop and maintain a general understanding of how the antitrust laws operate in order to reduce simultaneously their potential exposure to private as well as to governmental challenges.

A brief review of the Supreme Court's six health care antitrust decisions in the years since *Goldfarb* reveals great concern, therefore, with professionally-imposed restrictions that undercut competition. In 1980, by a plurality decision, the Supreme Court in *FTC v. AMA* affirmed a Court of Appeals decision holding that various AMA prohibitions on contract practice and on non-deceptive physician advertising and solicitation unlawfully inhibited competition among health care providers.³ Two years later, in *Arizona v. Maricopa County Medical Society*, the Supreme Court condemned as unlawful price fixing a scheme whereby doctors estab-

lished a schedule of maximum fees that could be claimed as full payment for services under certain insurance plans; the Court observed that, in operation, maximum fee schedules tend to serve also as minimum fee schedules.⁴ In 1986, in *Indiana Federation of Dentists*, the Court supported the FTC's challenge to a dental association's rule prohibiting dentists from providing copies of x-rays to insurers for review; the rule unlawfully restrained competition because it withheld from consumers, and their insurers, information needed to make informed decisions in the market for dental services.⁵ In *Patrick v. Burget* in 1988, the Supreme Court permitted a doctor to challenge a peer review process that had been used for anticompetitive, exclusionary purposes and which was not adequately supervised by the state authorities.⁶ Most recently, in *Summit Health v. Pinhas*, another peer review case, the plaintiff, a surgeon, asserted that a hospital, its owner, and its medical staff conspired to exclude him because he had refused to follow what he believed to be an unnecessarily costly surgical procedure. The Court concluded that the conspiracy, if proven, would have a sufficient, potential impact on interstate commerce to warrant invocation of the antitrust laws.⁷

The Court, however, has by no means declared "open season" on the professions generally, or the medical profession specifically. In its 1984 decision in *Jefferson Parish Hospital Dist. No. 2 v. Hyde*, the Court ruled that a hospital did not violate the antitrust laws when, in compliance with an exclusive contract for services with one group of anesthesiologists, the hospital denied privileges to the plaintiff-anesthesiologist.⁸ As in other industries, the Court recognized that certain contractual restraints in the health care area can promote the quality and efficiency of medical service delivery to consumers. So while the

Supreme Court has brought the health care industry into the antitrust fold and has consistently condemned price fixing and other unreasonable restraints on competition, the Court has also respected the creation of true efficiencies and accorded health care providers the kinds of defenses that the antitrust laws generally provide.

These six Supreme Court cases also demonstrate an important consideration that is often lost when discussing the Commission's activities; namely, we are one of many players in the antitrust enforcement process. While I certainly do not want to minimize the Commission's antitrust enforcement role, it is critical to remember that anticompetitive conduct which is of concern to the Federal Trade Commission will generally also be of concern to the Department of Justice, to state attorneys general, and to private litigants.⁹ Thus, even if the Commission wholly abandoned its antitrust enforcement responsibilities in the health care area, physicians and other health care providers would still remain subject to the proscriptions of the antitrust laws and would still face the prospect of expensive and time consuming litigation if they engaged in anticompetitive behavior. I daresay that a comprehensive review of the caselaw would demonstrate that private parties — most particularly, doctors and health care providers — have brought more health care antitrust cases than have state and federal agencies combined. Indeed, the prospect of treble damages gives private litigants a substantial incentive to bring cases, test new theories of liability, and push the frontiers of the law in matters that do not warrant the attention of government officials.

In the health care field, challenges by private parties typically arise from situations involving, for example, negative peer reviews; de-

nial of hospital privileges; restrictions on the use of privately owned imaging, diagnostic, or therapeutic equipment; and limitations imposed by medical associations on a physician's prices, advertising, or business affiliations. The antitrust laws are implicated in these cases because they typically involve the complaining physician's efforts and opportunities to compete, rather than his or her professional skills. While it is a good idea to pay attention to the concerns and priorities of antitrust enforcement agencies, it is even more important for doctors and their medical societies to develop and maintain a general understanding of how the antitrust laws operate in order to reduce simultaneously their potential exposure to private as well as to governmental challenges.

I would like to discuss some recent FTC health care antitrust matters, therefore, in the context of an analytical model that may help you, in your own practices, to predict when you need to worry, and when you don't. This conceptual model, builds from the straightforward proposition that an antitrust problem is most likely to exist where there is (1) market power and (2) either collusive or exclusionary activity.

An antitrust problem is most likely to exist where there is market power and either collusive or exclusionary activity.

This model, of course, is only a broad-brush description. It doesn't cover all antitrust violations, only most. And, as with most generalizations, the aphorism applies: "easy to say, tough to apply." More elaboration is needed if the model is to

have predictive value. Consequently, I would like briefly to examine the concept of market power, and then examine the kinds of collusive or exclusive activities that warrant concern and have attracted the Commission's attention in recent years.

Market Power

In general, antitrust enforcers focus their attention on the improper acquisition or exploitation of market power. The courts have defined market power as the power to "raise price and restrict output," or as the "power to force a purchaser to do something that he would not do in a competitive market."¹⁰ In economic terms, market power exists when the seller of a good or service so dominates a market that it can establish a price premium without worrying that a competitor could take away its share of the market by pricing its goods closer to its costs. One who wields market power has the ability to raise prices, limit supply, reduce variety, chill innovation, or otherwise restrain competition. Consumers are then forced to do things they would not do in a competitive market; namely, deal with the vendor on his/her terms, to accept his/her goods at his/her price. Without competition, the consumers have nowhere else to turn.

Identifying market power poses several difficult problems. First, it is seldom possible to identify market power without first defining the market in which that power supposedly is held. For example, when does the market for neurosurgical services include all physicians, or all surgeons, as opposed to neurosurgeons alone? When is a market limited to doctors with privileges at a given hospital, and when does it include physicians practicing at other hospitals in the community, or located throughout a broader geographic region? Typically, antitrust defendants seek to define a market broadly, so that their com-

petitive position will appear to be less significant.

Second, once the market is defined, assessing an individual or group's power within it presents a new set of difficulties. This task requires knowing, among other things, which suppliers of the product or service will enter the market if prices rise, how quickly this entry will occur, what substitutes are potentially available for the product or service at issue, and how readily consumers will turn to those options. Furthermore, with only a few exceptions, we cannot easily conclude that a practice constitutes an unreasonable use of market power without understanding its beneficial as well as its injurious effects. All of these issues, and others, raise highly technical problems. I won't delve into them here, therefore, other than to emphasize that these difficulties create a need — and responsibility — for courts and enforcement agencies to have a sophisticated understanding both of the challenged practice and of the industry or profession involved.

It is important to emphasize that an individual violates no antitrust law merely by possessing market power. Moreover, both fairness and common sense require that courts allow for the possibility that market power may be acquired by accident or skill — an individual may simply be the only person, or the best person, serving the market. Thus, the concern of the antitrust laws, in the words of the Supreme Court, is:

the willful acquisition or maintenance of [monopoly] power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.¹¹

Even monopolists, therefore, are free to compete and to enjoy the legitimate fruits of their monopoly position. They may charge monopoly prices, and earn monopoly profits. Indeed, it is the prospect of

these high profits that creates an incentive for new firms to enter the market, innovate, and compete vigorously. Problems arise, however, when businesses collude to acquire market power. Problems also arise when those who possess monopoly power — whether individuals or collaborators — use their monopoly position to exclude rivals and thereby perpetuate and expand their market power.

In the Cleveland Clinic matter, the staff physicians' concerted boycott threats, coupled with their intentional misadministration of the privileges application process, gave the staff physicians the power to exclude innovative, lower-cost rivals from the market.

Before I leave this discussion of market power, one point bears emphasis. While market power is a reliable indicator of the possibility of anticompetitive behavior and thus useful in developing this sort of simplified model, there are a few situations where the anticompetitive behavior is so blatant that the courts will impose liability even where market power does not exist. Price fixing conspiracies, for example, are illegal regardless of whether or not the conspirators have market power. As a matter of economics, however, price fixing conspiracies will do the conspirators little good if they don't have market power, since consumers could simply shift their patronage to the conspirators' lower priced ri-

vals. Courts and enforcement agencies, therefore, often consider the lack of market power to be an indicator that the challenged practice is something other than a naked price fixing conspiracy, perhaps a legitimate joint venture, for example. However, it remains that while market power is a useful indicator of a potential anticompetitive problem, its importance in the analysis recedes where the collusive behavior among competitors becomes egregious. So, to that limited extent, the market power component of the model is overstated.

Collusion

Collusion transforms competitors into conspirators. A conspiracy does not depend on a superior product, business acumen, or historical accident to generate profit for its participants; rather, it relies on the aggregation of several competing firms' market positions into a unified, exploitable, market presence. Whereas the antitrust laws permit individuals to possess market power and reap the benefits so long as they act with legitimate business justification,¹² conspiracies in restraint of trade rarely have any legitimate business justification and are therefore illegal.

Among collusive activities, price fixing is the most serious. Less than a month ago, the Court stated that, "No antitrust offense is more pernicious than price fixing."¹³ Other conspiracies, however, such as boycotts and market division or customer allocation agreements, are viewed with almost equal gravity. Because conspiracies and collusion — and I use the terms synonymously here — are so serious, courts will not hear justifications that the conspiracy is good for the public — for example, that price-fixing assures high prices and thereby reduces the temptation of professionals to do shoddy work.¹⁴ Competition is viewed as too vital to be subordinated in such a fashion. Rather, courts accept, as they

must, Congress' judgment that the promotion of competition will produce the greatest benefit for the public.¹⁵

This does not mean that every agreement among competitors generates antitrust liability. Many agreements, even those between rivals, are not of antitrust concern. A lot of agreements arise in the form of joint ventures that do not confer market power on the participants. Rather, these agreements are intended simply as a means for firms to combine their knowledge and resources in order to produce superior products and greater efficiencies. Usually, such conduct is beneficial and therefore of no enforcement interest to the Commission.

The difficulty is in determining which agreements are anticompetitive and which are not. It is not always easy, for example, to distinguish a cartel from joint venture. Although price fixing is readily condemned, an agreement among doctors establishing a joint practice is seldom objectionable, even when the partners set a price that the partnership will charge for a given service.

So how does one tell the difference between conspiracy, which is bad, and collaboration, which is beneficial or benign? There are two approaches that we can and do use. First, we ask whether the agreement results in the creation of market power — that is, whether the suspiciously collusive agreement permits the group to exercise control over market price, market entry, or other critical competitive factors. If not, it is doubtful that the group entered the agreement for anticompetitive purposes or that the agreement presents much risk of injury to competition.

Second, we consider whether the agreement creates a true partnership or joint venture. We ask, therefore, whether there is some integration of functions that will pro-

vide efficiencies for the parties, and whether there is a sharing of economic risk. In a medical partnership, for example, doctors share office space, administrative help, and the like. If the office lease is unwisely negotiated, all members of the partnership suffer. Where there is no integration of functions and sharing of risk, however, the agreement among rivals is just that — an agreement among rivals — and, such agreements are treated with great suspicion under the antitrust laws.¹⁶

A recent FTC matter turned on this second factor. The Southbank case involved twenty-three obstetrician/gynecologists, who together comprised nearly the entire active ob/gyn staff at Baptist Medical Center in Jacksonville, Florida. The FTC's complaint alleged that, beginning in 1986, the physicians formed an independent practice association, known as the Southbank IPA, and then set a schedule of fees that they would charge to third party payors that entered into agreements with Southbank.

The antitrust concern with self-referral is with the impact of the practice on the market for the ancillary service — the capacity of physician self-referral to turn a competitive, ancillary service market into a monopolized one. . . .

All of Southbank's member-physicians then allegedly resigned from participating in an HMO that used the Baptist Medical Center. The physicians allegedly told the

HMO that any further contractual arrangements would have to be made collectively on their behalf through Southbank. According to the complaint, the HMO twice was forced to raise its payments to Southbank, because the HMO viewed it as essential to have ob/gyns at Baptist in order to operate its HMO program, and meeting Southbank's demands was the only way to satisfy this need. The elevated payments to Southbank were ultimately passed on to consumers in the form of higher HMO premiums.

The key to this case, and the single most important point that you should take away from it, is that unlike many other physician groups that have formed IPAs, the Southbank physicians did not jointly share any financial risk of loss or profit through Southbank. Nor did their collaboration through Southbank create any new product or service. Furthermore, unlike a normal medical partnership, there was no integration of functions permitting the physicians to provide services more efficiently than would have been possible by acting separately. When stripped of all its legal trappings, Southbank IPA did not create a new "competitor." Instead, it simply created a mechanism that permitted its member physicians — who otherwise are competitors of each other — to collude. We did not view Southbank as a true IPA, therefore, but as a sham, a "garden-variety" price-fixing cartel in the guise of an IPA. Analyzed in terms of the framework, the *Southbank* case is an example of collusion leading to exploitable market power.

Southbank did not go to trial. Instead, the case was settled by a consent order under which the physician/respondents, although not admitting wrongdoing, consented to dissolve their "IPA." The order also prohibits the physician/respondents from dealing with any third-party payor on collectively de-

terminated terms, unless the physicians form an "integrated joint venture." In an "integrated joint venture," as defined by the order, the participants pool their capital to finance the joint venture and share substantial risk of financial loss if the venture's costs or patients' use of health care services are unexpectedly high. The *Southbank* order marks the first time that the Commission has required dissolution of a health care organization as a condition of settlement.

In my view, these consent order provisions lay to rest some of the criticism that I have heard from medical professionals that the Commission unfairly singled out an IPA for enforcement action. We recognize that a host of factors may combine to encourage physicians to integrate their practices and share the risks of a common enterprise. When practices actually are integrated, when risks and benefits are shared, then the Commission, and the antitrust laws, will treat the new entity as a single competitor. In a true IPA, we do not concern ourselves with collective pricing decisions, any more than we would concern ourselves with collective pricing by professionals — whether doctors, lawyers or others — who practice in an integrated partnership or firm. But absent such integration, and particularly where the putative association confers market power, collusive pricing decisions invite the attention of the Commission, state law enforcement agencies, and private plaintiffs. Where the conduct is egregious, the criminal jurisdiction of the Justice Department may also be implicated.

Exclusion

Just as most collaboration among rivals results in legitimate partnerships or joint ventures, most exclusion of rivals is also unobjectionable. Indeed, exclusion most commonly is a natural by-product of the competitive process itself. Every smart move that an efficient

competitor makes has the tendency to eliminate rivals and allow him to capture those rivals' share of the market. This is the dynamic of vigorous competition. Efficient firms beat out less efficient firms. Where this occurs, antitrust has no role to play.

But where exclusion is based on misuse of market power — whether held by an individual or a group — competitive market forces are evaded or negated, and vigorous antitrust enforcement becomes essential. This was the situation in two recent FTC health care matters. In the first, the challenged activity was undertaken by an individual; consequently, only two elements of the framework are present: market power, and exclusionary conduct. In the second case, the exclusionary activity was undertaken by a group, and thus all three elements are present.

In the case of *Gerald S. Friedman, M.D.*, the respondent had market power in the provision of out-patient kidney dialysis services in several communities. In some instances, he had the only, or most advanced, or most convenient facilities available. Physicians were required to seek staff privileges to use these facilities. According to the complaint, Dr. Friedman would condition his grant of privileges on the referring physician's agreement to use exclusively Dr. Friedman's in-patient services, for which there were reasonable alternatives.¹⁷ By gaining market power in the provision of in-patient dialysis, Dr. Friedman could charge supra-competitive prices for those services, a practice that government regulations prevented with respect to out-patient dialysis.

Pursuant to a consent order with the FTC, Dr. Friedman was ordered to cease and desist conditioning the use of his out-patient facilities on a referring physician's exclusive use of his in-patient services. Similarly, Dr. Friedman was ordered to

cease and desist from denying privileges to physicians who owned, used, or operated competing out-patient facilities or services.

Dr. Friedman was engaging in a "time-honored" practice known as tying. He leveraged his power in one market — out-patient dialysis — in order to gain power in another market — in-patient services. The practice excluded rivals from the in-patient dialysis market because patients and their referring physicians were compelled to patronize Dr. Friedman for in-patient dialysis services if they were to have his vitally necessary out-patient facilities made available to them.

The question may arise, however, as to why Dr. Friedman isn't just a monopolist competing vigorously. Shouldn't he have the right to refuse to deal with anyone — in this case, physicians who deal with his competition. Interestingly, the Supreme Court addressed this question in a case that it decided just last month. In *Eastman Kodak Co. v. Image Technical Service, Co.*,¹⁸ Kodak allegedly reversed an established policy of making replacement parts for its copiers available to independent service organizations. Under the revised policy, Kodak would sell replacement parts only to purchasers of Kodak equipment who also either purchased Kodak servicing or repaired their own machines. Allegedly, Kodak already had monopoly power in the market for replacement parts and implemented the new strategy to strengthen its grip on the market for servicing its machines.

The Court held that such allegations, if proven, would constitute tying. The Court held that the right to refuse to deal with one's competitors is not absolute, but "exists only if there are legitimate competitive reasons for the refusal."¹⁹

The *Kodak* case is analogous to the *Gerald S. Friedman* case. Just as Kodak conditioned the sale of

replacement parts on the customer's refusal to deal with independent service companies, Dr. Friedman conditioned the use of his out-patient dialysis facilities on the referring physician's refusal to deal with rival providers of in-patient dialysis services. By not selling replacement parts to its competitors in the servicing market, Kodak effectively starved its competitors of critical materials. By not selling out-patient dialysis services to those who used competing in-patient services, Dr. Friedman effectively starved the rival in-patient dialysis providers of their customers. Although Kodak's pressure was directly on its rivals whereas Dr. Friedman's was on referring physicians and their patients, in neither case did the tying and refusals to deal appear to contribute to a better product or service. Nor, in either case, did any efficiencies appear to have been created or enhanced. Rather, the goal in each case was simply to use power in one market to gain it in another. This is not competition on the merits, and does not constitute a "legitimate competitive reason." Such conduct, therefore, constitutes an unlawful, exclusionary use of market power.

The second exclusionary conduct case that I would like to discuss illustrates how the practice of granting hospital privileges can go wrong. Recently, we took enforcement action against the medical staffs of two major hospitals in Broward County, Florida. Allegedly, the physicians on these medical staffs sought to prevent the Cleveland Clinic from establishing a regional operation in southern Florida. As some of you may know, the Cleveland Clinic offers a variety of sophisticated medical services, and markets these services quite differently from traditional fee-for-service practices: the Clinic offers surgery, for example, for a "unit price," which includes all services

attendant to the surgical procedure to be performed.

According to the complaints issued by the Commission, the medical staffs sought to frustrate the Cleveland Clinic's market entry by preventing the Clinic's doctors from getting staff privileges at area hospitals. These privileges were necessary for the Cleveland Clinic to be able successfully to enter the market, since the Cleveland Clinic did not have a hospital of its own in Broward County. To accomplish their aim, therefore, the staff physicians allegedly threatened to engage in walkouts and other economic reprisals if their hospitals entered into any joint venture with the Clinic. In addition, when individual Cleveland Clinic physicians sought hospital privileges, the medical staffs allegedly either refused to give them applications or unduly delayed action on the applications. Taken as a whole, it appeared that this alleged conduct was not motivated by any legitimate interest in ensuring quality of care at the medical staffs' respective hospitals, but rather by the economic threat that the Clinic posed to the staff physicians' private, fee-for-service practices.

The medical staffs now have entered into consent orders with the FTC. These orders bar boycotts, threats of boycott, and other anti-competitive activity by the staff physicians. Since the FTC intervened in the situation, several Cleveland Clinic physicians have obtained staff privileges at one of the hospitals involved, and the Clinic is now providing a variety of medical services to consumers in southern Florida.

Let me emphasize that the FTC's goal in pursuing this matter was not to promote the Cleveland Clinic, or any particular form of physician organization. Nor should the FTC's decision to intervene be taken to suggest that we will second-guess the professional judgment of physicians who advise a hospital regard-

ing the suitability of a candidate's medical qualifications to receive privileges. We believe that the process of professional review and evaluation continues to serve admirably both patients and the hospitals that care for them.

But, where the privileges application process is used not to promote legitimate quality of care concerns but to serve anticompetitive aims, there may be a problem.²⁰ In the *Cleveland Clinic* matter, the staff physicians' concerted boycott threats, coupled with their intentional mis-administration of the privileges application process, gave the staff physicians the power to exclude innovative, lower-cost rivals from the market. In essence, by joining forces, the staff physicians were able to appropriate for themselves a marketplace decision that properly belonged to consumers. Such conduct is illegal.

How can this kind of result be avoided? First, for hospitals: the collusive aspects of the case could have been reduced had the hospital administrator done what he or she was supposed to do — that is, to make the final and independent decision on the question of privileges. Although it is unquestionably important to have the informed and professional advice of physicians in evaluating the qualifications of a candidate for hospital privileges, the ultimate decision should rest with the hospital administrator, not with staff physicians who are competitors or potential competitors of the candidate. The failure of a hospital administrator to fulfill this responsibility can open his or her hospital, as well as any involved staff physicians, to potential anti-trust liability.

Second, for the physician privileges committee: it is important to evaluate candidates for privileges on their medical qualifications — and to document the manner in which any negative recommendations proceed from an objective view of those qualifications. Al-

though a committee recommendation against privileges based on non-medical factors is not necessarily illegal — as long as it is only advice, both in fact and in form — a well-documented decision based on the candidate's medical qualifications has far less chance of being misunderstood as a collusive, anti-competitive act.

Third, for individual physicians: I would recommend that each committee member take great care to maintain his or her independence of action, whether voting on privilege applications, discussing applicants' qualifications with fellow committee members, or taking other privileges-related actions. In that way, a legitimate committee will not devolve into an unlawful conspiracy, and staff advice will not become a staff command. Let me elaborate.

It does not violate the antitrust laws for a staff physician, acting independently, to vote against granting privileges for whatever reasons he or she chooses, including anti-competitive reasons. If other committee members, acting independently, feel similarly, the privileges committee presumably will advise against granting privileges. This conduct violates no antitrust laws. Such conduct leads only to poor decisions, not illegal ones. By contrast, in *Cleveland Clinic* the staff physicians went further. They acted collectively. The staff physicians didn't merely evaluate applications for privileges, but jointly engaged in threats and other conduct to ensure that the applications would not make it through the committee, or if they did, that they would never be accepted by the hospital. So in *Cleveland Clinic*, we have all three elements of the framework I described previously — market power, collusion, and exclusion — and as a result, the FTC intervened.

So there you have it. The three elements are market power, collusion and exclusion. The model

starts from the proposition that market power either exists or can be assembled. Illegal collusion occurs when a group of competitors act jointly to acquire market power that wouldn't otherwise be available to them. Illegal exclusion occurs when an individual or group prevents its rivals or potential rivals from hindering the individual's or group's efforts to solidify, extend, or exploit its market position. In applying the model, therefore, you will frequently see collusion used as the means of acquiring market power, and exclusion as the means of exploiting it. Sometimes collusion is absent, as when market power is held and exploited by a single individual. And sometimes exclusion is not present, as when all the firms in a market have conspired to fix prices. The model's quick test, therefore, is to look for market power — held by an individual or a group — plus *either* collusive or exclusive behavior.

Self-referral.²¹

Before closing, I would like to discuss an exclusionary practice that has prompted several FTC investigations that now are at quite advanced stages — physician self-referral. The prototype self-referral situation involves a group of physicians who routinely refer patients for some ancillary service, such as MRIs, lithotripsy, or dialysis. Although there are several suppliers of this ancillary service in the market, the physicians realize that collectively they make most of the patient referrals. The physicians, therefore, form a joint venture, purchase a facility to supply the ancillary service, and seek to "channel" all their patients to that facility. The outcome, of course, is that the competing facilities wither and go out of business. Meanwhile, the physicians' facility gains monopoly power and the ability to raise prices above competitive levels.

Is this unlawful? Putting antitrust concerns aside for the moment, as

you probably know, just this year Social Security Act restrictions became effective regarding referrals by physicians to clinical laboratories that the physicians either own or with which they have other compensation arrangements.²² In addition, the long-pending "safe-harbor" rules under Medicare's anti-kickback statute became effective about a year ago. These rules limit a physician's ownership of, and income from, joint ventures to which the physician makes referrals.²³ And, of course, the propriety of physicians "profiting purely from their ability to refer patients to outside facilities" has been a hot topic in medical association circles.²⁴

By contrast with these conflict-of-interest concerns, the antitrust concern with self-referral is with the impact of the practice on the market for the ancillary service — the capacity of physician self-referral to turn a competitive, ancillary service market into a monopolized one for reasons that have nothing to do with the physicians' business acumen or ability to provide a better product.

Of course, not all physician self-referral constitutes an antitrust violation. In some circumstances, physicians may be in the best position to identify an unmet health care need in their community, invest with colleagues to satisfy that need, and monitor how well their joint venture is actually performing. Sometimes, a physician-owned ancillary service facility may be the best in the area for the patient's problems, or the most convenient. But, neither joint ownership of an ancillary service facility, nor self-referral to that facility where medically justified, necessitates an agreement — or tacit understanding — among the referring physicians to channel patients to their jointly-owned facility.

Depending on the facts, we might challenge self-referrals under various legal theories. In some situations, self-referral might constitute

as an attempt to monopolize the market for the ancillary service. In addition, ownership of the ancillary service facility might constitute actual monopolization of the market for the ancillary service. Or, under the laws governing mergers, we might view as unlawful a joint venture to which the physician-owners have agreed — expressly or tacitly — to channel their patients, on the ground that the joint venture's effect "may be to substantially lessen competition, or to tend to create a monopoly."²⁵ Indeed, self-referrals might even be viewed as akin to tying, where use of the ancillary facility may be viewed as tied, expressly or implicitly, to the purchase of medical services from the facility's physician-owners.

Regardless of the legal theory chosen in any given case, the analytical framework we have been using offers the necessary warning signs. An understanding among all, or most, referring physicians in a market to channel their patients only to a jointly-owned facility constitutes *collusion*. Collusion under these circumstances would give the physicians *market power* over the supply of customers for the ancillary service. And, the effect of the channelling would result in *exclusion* of the jointly-owned facility's rivals and thus, in the acquisition of market power and imposition of supra-competitive prices in the market for the ancillary service.

Conclusion

The conceptual model that I have suggested here this morning — asking whether there market power coupled with either collusive or exclusionary behavior — is far from a complete legal analysis. I believe, however, that it can prove

to be a helpful starting point. Let me caution you, however, that antitrust counseling is a little like brain surgery — it is a procedure that you should not perform on yourself and that should not be performed at home. But this little model may be useful in helping decide when some counselling may be needed, and before the physician or the medical society takes some step that might result in antitrust exposure.

References

1. But c.f., *American Medical Ass'n. v. U.S.*, 317 U.S. 517 (1943) in which the AMA was found guilty under Section 3 of the Sherman Act of a conspiracy to restrain trade. Specifically, the AMA prevented its members from serving or consulting with physicians employed by Group Health Plans. The AMA also sought to prevent hospitals from affording privileges to Group Health physicians. In this case, however, the Court found it unnecessary to determine whether the practice of medicine was subject to the antitrust laws. Since the case involved a conspiracy in restraint of trade, which the Court viewed as covered by Section 3 regardless of the profession or business of the conspirators, the fact that the conspirators in the case were members of a learned profession was deemed irrelevant.
2. *Goldfarb v. Virginia State Bar*, 421 U.S. 773 (1975).
3. *AMA v. FTC*, 94 F.T.C. 701 (1979); *aff'd* as modified, 638 F.2d 443 (2d Cir. 1980), *aff'd* mem. by an equally divided Court, 455 U.S. 676 (1982).
4. *Arizona v. Maricopa County Medical Society*, 457 U.S. 332 (1982).
5. *Indiana Federation of Dentists*, 476 U.S. 447 (1986);
6. *Patrick v. Burget*, 486 U.S. 94 (1988).
7. *Summit Health v. Pinhas*, 111 S.Ct. 1842 (1991).
8. *Jefferson Parish Hospital Dist. No.2, v. Hyde*, 466 U.S. 2 (1984).
9. In most instances, each of these different kinds of antitrust plaintiffs may seek remedial or preventive injunctions. Unlike the FTC, however, the Department of Justice may also prosecute violations of the Sherman Act as criminal law violations. In addition, the Department of Justice and private litigants each may seek treble damages for antitrust injury that the United States or those private litigants, respectively, has suffered.
10. *Jefferson Parish v. Hyde*, 466 U.S. 2, 14; See also, *United States Steel Corp. v. Fortner, Inc.*, 394 U.S. 495, 503 (1969).
11. *United States v. Grinnell Corp.*, 384 U.S.563, 570-71 (1966).
12. *Eastman Kodak, Co. v. Image Technical Servs., Inc.*, slip op. at 30 fn.32 (90-1029 June 8, 1992.)

13. *FTC v. Tior Title Inc. Co.*, slip op. at 15 (91-72 6/12/92).

14. *Nat'l Society of Professional Engineers v. United States*, 435 U.S. 679 (1978).

15. A jointly-adopted restraint of trade may be lawful if the collaborators can demonstrate that the agreement is necessary in order to bring to market a product or service that could not otherwise be made available. Such a restriction, however, will be closely examined to ensure that it is no broader than reasonably necessary to accomplish its purpose. *NCAA v. Oklahoma Bd. of Regents*, 468 U.S. 85 (1984).

16. Sometimes, the collaboration is a true joint venture but does create market power. This is often the case with trade and professional associations. Depending on the circumstances, we must ask such questions as whether the association's decision-making process is biased in favor of economically-interested parties [*Allied Tube & Conduit Corp. v. Indian Head, Inc.*, 108 S.Ct. 1931 (1988)], or whether the association's decisions result in more competitive benefit than harm. *C v. Indiana Federation of Dentists*, 476 U.S. 447 (1986).

17. In addition, Dr. Friedman allegedly barred physicians from using his out-patient facilities if those physicians also used, operated, or owned other out-patient services.

18. *Eastman Kodak, Co. v. Image Technical Servs., Inc.*, (90-1029 June 8, 1992).

19. *Eastman Kodak, Co. v. Image Technical Servs., Inc.*, slip. op. at 30 n.32 (90-1029 June 8, 1992).

20. The privileges process for other than legitimate quality of care concerns may now always raise an antitrust problems. For example, Bureau of Competition is still reviewing the lawfulness of "economic credentialing," the practice whereby a hospital, absent any conspiracy among its staff physicians, chooses to deny privileges to a doctor purely for economic reasons. Such conduct may have antitrust implications where, for example, an otherwise qualified doctor is rejected because he charges less than prevailing rates, and the administrator fears that extending him privileges may create personnel problems among existing staff.

21. See Prepared Remarks of Kevin J. Arquit, Director, Bureau of Competition, Federal Trade Commission, before the National Health Lawyers Ass'n, "A New Concern in Health Care Antitrust Enforcement: Acquisition and Exercise of Market Power by Physician Ancillary Joint Ventures," January 30, 1992.

22. The restrictions, enacted as §6204 of the Omnibus Budget Reconciliation Act of 1989, Pub. L. 101-239, are contained in a new section (§1877) of the Social Security Act (§42 U.S.C. 1395nn).

23. Section 1128B(b) of the Social Security Act, 42 U.S.C. §1320a-7b(b).

24. American Medical Association, Council on Ethical and Judicial Affairs, Conflicts of Interest: Physician Ownership of Medical Facilities 4 (1991). On 12/11/91, the AMA's House of Delegates adopted this report. Recently, however, the AMA's membership rejected the Delegates' action.

25. 15 U.S.C. §18 (Clayton Act)

American Medical Association

Physicians dedicated to the health of America



For Your Benefit

AMA Lobbying Halts Medical Waste Proposal

Due to Federation grass roots contacts and American Medical Association lobbying, Rep. Rinaldo [R-NJ] did not offer his amendment to the House Resource Conservation and Recovery Act [RCRA] reauthorization bill.

Rinaldo's draft amendment would have

imposed increased regulation of the treatment, handling, disposal, and hauling of medical waste. Rep. Rinaldo and other House Energy and Commerce Committee cited physician and medical society contacts as the reason for not proceeding with medical waste amendments.

HCFA Follows AMA's Suggestion for PRO Reform

The Health Care Financing Administration is drafting proposals to reform the Medicare Peer Review Organization in ways that the AMA has long advocated.

The proposal, called the Fourth Scope of Work, outlines requirements that the nation's 53 PROs must undertake beginning April 1, 1993. The current

draft suggests redirecting peer review efforts away from spotting individual clinical errors. Instead, PROs would analyze patterns of care and share analyses with physicians, hospitals, medical staff and state medical associations.

HCFA expects to complete the proposal late this summer.

AMA Provides HCFA with RBRVS Update Recommendations

The American Medical Association has established a process for developing relative values for new or revised codes in the *Current Procedural Terminology*.

The AMA/Specialty Society Relative Value Scale Update Committee, or RUC for short, will provide recommendations for HCFA to use in

updating the new Medicare resource-based relative value scale physician payment schedule. RUC is composed of physician representatives from the AMA, 22 medical specialties, American Osteopathic Assn. and the CPT editorial panel. RUC will hold three or four meetings in 1992 and 1993 to prepare for the 1994 CPT.

Questions and Answers: How Will CLIA-88 Affect Your Practice?

FOUR YEARS AGO, Congress passed CLIA-88 in response to newspaper articles and television stories concerning reports of deaths from misread pap smears. CLIA-88 is intended to ensure the quality of all human clinical laboratory testing no matter where performed. The number of sites regulated are estimated to be over 200,000. More than half are estimated to be physicians' offices which previously have been unregulated.

Two years ago, the Health Care Financing Administration (HCFA) published a proposed rule which, if finalized, would have been extremely unreasonable and expensive. In response to this proposal, the AMA spearheaded an action with the state and national medical specialty societies that generated an unprecedented 60,000 written comments on the regulations. As a result of the AMA comments, a much more reasonable final regulatory scheme was published February 28, 1992.

To Whom Does CLIA-88 Apply?

CLIA-88 applies to all testing of human specimens for the diagno-

sis, prevention, or treatment of disease or health problems. This includes every testing entity from physicians who perform only basic tests for their patients, health fairs, and hospitals, not just complete clinical laboratories. The only exceptions are for forensic purposes, research labs that do not report patient results, and facilities certified by the National Institute on Drug Abuse to perform only urine drug testing.

When Are the CLIA-88 Regulations in Effect?

September 1, 1992, is the effective date for registration of all laboratories and all other requirements for previously regulated laboratories. January 1, 1994, is the effective date for proficiency testing requirements for previously unregulated laboratories. September 1, 1997, is the effective date for testing personnel employed in a designated high complexity laboratory.

This information is derived from an AMA publication, *What Every Physician Should Know About CLIA-88*. Contact Joyce Butler at MAG for further information about how to obtain this publication as well as a related video and other material.

Does CLIA-88 Apply If the Tests Are Performed for No Charge?

Yes. CLIA-88 is not a reimbursement regulation and applies to all clinical laboratory tests in the United States no matter whether reimbursed or not.

Does CLIA-88 Apply Only to Tests Reimbursed by Medicare?

No. CLIA-88 applies to all clinical laboratory tests, not just those reimbursed under the Medicare program.

If a Physician or Other Health Care Provider Only Collects Specimens, Is That Physician or Entity Required to Register Under CLIA-88?

No. If only phlebotomy and/or collection of specimens (such as urine, culturettes, pap smears, or biopsy) are performed and specimens are transported to an approved laboratory, CLIA-88 does not apply to the "collecting" entity.

What Sanctions May Be Imposed for Failure to Comply with CLIA-88?

Sanctions may include suspen-

sion of testing certain analytes or specialties, suspension of Medicare/Medicaid payments, civil monetary penalties or suspension, and limitation or revocation of the CLIA-88 certificate. Also, an intermediate corrective action may be imposed prior to sanctions unless there is an immediate threat to patients.

What Do Physicians Have to Do to Sign Up?

First, physicians need to obtain either a 2 year certificate of waiver, or if the physician performs non-waived tests, a 2 year registration certificate. As a result of a survey form sent to physicians last fall, HCFA will mail each physician who responded an application form, along with a statement of the fee owed for the certificate.

When do Physicians Have to Register?

By September 1, 1992, each physician should have a waiver certificate or a registrations certificate along with a CLIA-88 ID number. On September 1, 1992, Medicare/Medicaid will not reimburse for clinical laboratory services if this CLIA-88 ID number is not submitted with the claim. Non-registered physicians and other unregulated entities providing laboratory services may be liable for penalties. Incases posing immediate harm to patients, sanctions may be imposed prior to a hearing. In all other cases, a hearing will be conducted prior to imposing sanctions unless the laboratory pleads guilty and corrects the situation.

If a Physician Failed to Receive or Submit a CLIA-88 Survey Form (109) Sent by HCFA in November 1991, What Can the Physician Do to Correct the Situation?

Call HCFA's CLIA Hot Line at 410-290-5850.

TESTING CATEGORIES

How Do Physicians Know Into Which Category Their Tests Fall?

CLIA-88 sets out three levels of testing: waived, moderately complex, and highly complex. Most physicians will fall within the waived or the moderately complex levels. Regulations are based on the highest level of testing performed. For example, if four of the tests performed are listed as waived tests, but one test falls into the moderately complex level, the laboratory must meet the requirements of the moderately complex level.

What Are the Criteria for Assigning Tests to the Waived Category?

To be categorized as "waivered" tests, the tests must: have been cleared by the FDA for home use; pose no reasonable risk of harm if performed incorrectly; and are performed by simple and accurate methodologies, as to render the likelihood of erroneous results negligible.

What Are the Waived Tests?

The following tests fall within the waived category:

1. Dipstick or Tablet Reagent Urinalysis for the following: bilirubin; glucose; hemoglobin; ketone; leukocytes; nitrite; pH; protein; urobilinogen; and specific gravity
2. Ovulation tests — visual color tests for human luteinizing hormone
3. Urine pregnancy tests — visual color comparison determination
4. Erythrocyte sedimentation rate (non-automated)
5. Hemoglobin (by copper sulfate)
6. Fecal occult blood
7. Spun microhematocrit
8. Blood glucose (FDA-cleared home use devices)

What are the Criteria for Tests to Be Categorized as Moderately Complex?

Tests that meet the following criteria are categorized as moderately complex tests: knowledge need to perform the test; training and experience required; complexity of reagent and materials preparation; characteristics of operational steps; availability of calibration, quality control and proficiency testing materials; troubleshooting and maintenance required; and degree of interpretation and judgement.

What Are the Criteria for Tests of High Complexity?

Tests that meet the following criteria are categorized as highly complex tests:

- knowledge needed to perform the test
- training and experience required
- complexity of reagent and materials preparation
- characteristics of operational steps
- availability of calibration, QC and PT materials
- troubleshooting and maintenance required
- degree of interpretation and judgement

Can a "Waived" Laboratory Perform a Test Not on the Waivered List?

No. The laboratory must notify HHS before performing and reporting results of tests not on the list.

CERTIFICATES

Other Than Register for a Certificate, What Do Physicians Need to Do to Bring Their Laboratory Testing into Compliance?

If physicians perform tests only in the waived category, they need to do nothing more than follow the

manufacturer's instructions and guidelines of using the laboratory equipment. No inspections will occur, except on a random basis to determine compliance with the waiver certificate.

Within the next two years, each physician who performs moderately or highly complex laboratory tests will be required to enroll in and successfully pass proficiency testing for each test. In addition, by 1995, a federal or state laboratory inspector will inspect the laboratory to determine if other standards (such as quality control quality assurance, and personnel) are met.

Are There Different Types of Certificates for Laboratories?

Yes. There are four types of certificates issued by HHS.

1. Certificate of Waiver — issued to laboratories that perform only tests on the waived list.
2. Registration Certificate — issued until HHS can determine if all applicable requirements are met through on-site inspection or verification of accreditation.
3. Certificate — issued to laboratories performing tests of moderate or high complexity subsequent to a determination of compliance with applicable requirements.
4. Certificate of Accreditation — issued to laboratories which meet the standards of an accreditation program approved by HHS. Laboratories in states with HHS approved licensure programs do not receive a certificate, but a state license or certificate.

For Laboratories Participating in Medicare, Is a Separate Medicare Certification Required?

No. There is no longer a separate Medicare certification required under CLIA-88. All laboratories receiving Medicare payment must meet CLIA-88 requirements.

INSPECTIONS

When Will Inspections of Laboratories Begin?

September 1, 1992, for laboratories currently regulated. All previously unregulated laboratories will be inspected sometime during the next two years — after inspection of the currently regulated laboratories.

Will Waived Laboratories Be Inspected?

Not on a regular basis — only on a random basis to monitor whether only waived tests are being performed or when a complaint has been received.

Will a Laboratory Be Given Advance Notice of The Routine Biennial Inspection?

No. These inspections will be done on an unannounced basis.

What Will the Laboratory Be Required to Allow the Inspectors to Do During the Inspection?

The inspectors must be allowed to: interview employees; have access to all testing areas; observe employees performing tests, data analysis and reporting; review all information and data necessary to determine that testing is not a serious risk to human health; evaluate complaints from the public; determine compliance with the Certificate; and collect information related to testing categorization. In addition, the laboratory will be required to provide copies of records and data required to evaluate the laboratory.

Who Will Conduct the Inspection?

The on-site inspection will be conducted by state laboratory inspectors.

How Long Will an On-Site Inspection Take?

HHS has indicated that a low-volume (less than 2,000 tests annually) Schedule A laboratory might require approximately 24 hours to inspect, and high-volume (more than one million tests annually) Schedule J laboratory might take approximately 89 hours to inspect. Additional follow-up inspections might be required if deficiencies are found.

Does a Laboratory Accredited by COLA or Some Other Private Non-Profit HCFA Deemed Accrediting Entity Need Another Inspection by the State Inspectors?

No. No state inspection will be required unless the laboratory has been chosen for a random validation inspection to determine if the accrediting entity's standards are acceptable.

FEES

How are Fees Determined?

Fees are based on test volume, the number of testing specialties or subspecialties and survey/inspection costs.

What Are the Testing Specialty and Subspecialty Categories?

All laboratory testing has been placed into the following 14 specialties or subspecialties:

- Cytogenetics
- Histopathology
- Histocompatibility
- Cytology
- Bacteriology
- Mycobacteriology
- Mycology
- Parasitology
- Virology
- Immunology
- Chemistry
- (Routine/Endocrinology Toxicology)
- Urinalysis
- Hematology
- Immunohematology

QUALITY CONTROL and QUALITY ASSURANCE

What Quality Control Procedures Are Required for a Moderately or Highly Complex Laboratory?

The laboratory must establish and follow written policies to monitor overall quality of the total testing process (preanalytic, analytic, and postanalytic). Such areas include patient test management, quality control, proficiency testing, comparison of test results, personnel, communications, complaint investigations, quality assurance review with staff and quality assurance records.

What Is the Effective Date for the Quality Control (QC) Policies?

Some of the requirements are being phased in over the next two years. The Centers for Disease Control has established the effective dates as follows:

Date: September 1, 1992 Requirements:

- Moderate complexity tests cleared by the Food and Drug Administration (FDA) for in-vitro diagnostic use:
 - Follow manufacturer's instructions
 - Prepare procedure manual
 - Calibrate at least once every 6 months
 - Perform two levels of control daily
 - Perform applicable specialty/subspecialty QC
 - Perform and document remedial actions
 - Document all QC activities
- Moderate-complexity tests developed in-house or cleared by FDA for in-vitro diagnostic use and that have been modified by the laboratory: follow all applicable QC rules.

- High-complexity tests: follow all applicable QC rules

Date: September 1, 1994 Requirements:

- Moderate and high complexity tests cleared by the FDA as meeting CLIA-88 QC requirements:
 - follow manufacturer's QC instructions
 - Meet regulatory QC requirements that are not met by manufacturer's instructions
 - All other tests: follow all applicable QC rules

What Quality Assurance Procedures Must a Moderately or Highly Complex Laboratory Have to Evaluate the Overall Quality of the Total Testing Process?

The laboratory must have mechanisms, such as those to monitor and evaluate corrective actions taken for quality control; monitor corrective actions for any unsatisfactory proficiency testing results; evaluate effectiveness of policies and procedures for assuring employee competency; or document all quality assurance activities.

Are All Moderately Complex or Highly Complex Laboratories Required to Meet the Same Proficiency Testing, Quality Control or Quality Assurance Standards?

No. These standards vary with the testing specialty or subspecialty. Each laboratory would need to comply with those requirements specific to the types of testing performed.

PERSONNEL

What are the Personnel Requirements for the Moderately Complex Laboratory?

Laboratory Director — responsible for the overall administration of the laboratory. The director must

be a physician or hold a doctoral, master's, or bachelor's degree in one of the sciences. The requirements for training or experience vary from 1 year at the doctoral level to 2 years at the master's level, and 4 years at the bachelor's level.

Clinical Consultant — liaison between the laboratory and its clients in matters related to reporting and interpreting results. The clinical consultant must be a physician or board-certified doctoral-level scientist.

Technical Consultant — responsible for the technical and scientific oversight of the laboratory and must be available on an as-needed basis. The technical consultant must be a physician, or have a doctoral, master's, bachelor's degree in one of the sciences with laboratory training or experience in each of the specialties or subspecialties in which he or she has the requisite training or experience.

Testing Personnel — responsible for processing the specimens, and reporting results. They must have at least a high school diploma and the appropriate training.

Is There a Phase-in Period for Physicians Currently Performing Laboratory Testing in Their Office to Obtain the Necessary Education or Training to Meet the Requirements of the Laboratory Director Laboratory?

Yes, by August 2, 1993. All physicians performing moderately complex testing one year prior to this date will be deemed to meet the requirements of the laboratory director or other functions of the laboratory.

How Do the Personnel Requirements for the Highly Complex Laboratory Differ from the Moderately Complex Laboratory?

The same personnel required for moderate complexity laboratories

are also required for high complexity laboratories. However, the overall training and experience requirements are higher and more specialized according to the types of testing performed. In addition, a general supervisor who is accessible to testing personnel at all times when testing is being performed is required and must provide on-site direct supervision to testing personnel who are high school graduates and cannot meet other qualification requirements.

PROFICIENCY TESTING (PT)

What are the Laboratory Specialty and Related Subspecialties for Which PT is Currently Required?

Specialty	Subspecialties
Microbiology	Bacteriology Mycobacteriology Mycology Parasitology Virology
Diagnostic Immunology	Syphilis serology General immunology
Chemistry	Routine chemistry Endocrinology Toxicology
Hematology	None
Pathology	Gynecologic cytology
Immuno-hematology	ABO and D (Rho) typing Unexpected antibody detection Compatibility testing Antibody identification

How Many PT Events Per Year Will Be Required of Laboratory?

Three events will be required.

How Many Challenges Will a Laboratory Have to Perform in Each "Event"

Five challenges will be required per each "event."

What Is the PT Effective Date for Currently Regulated Laboratories?

September 1, 1992.

When Must a Newly Regulated Moderately or Highly Complex Laboratory Be Enrolled in an Acceptable PT Program?

By January 1, 1994, a newly regulated laboratory must have successfully participated in JT.

When Will Sanctions for Failure of PT Become Effective?

January 1, 1995.

A Laboratory Must Participate in How Many PT Programs?

A laboratory must participate in one PT program for each specialty or subspecialty for which the laboratory performs testing.

What Are the Standards for Testing the PT Samples?

The laboratory must treat the PT samples the same as patient samples. The laboratory must not send the PT samples out to another laboratory to be tested.

What Will Happen If the Laboratory Does Refer the PT Samples Out to Another Laboratory?

The laboratory will have its certificate revoked for at least one year.

What Is "Successful PT Participation"?

Achieving a score of satisfactory performance for two consecutive testing events or two out of three consecutive events is considered "successful participation" in PT.

If the Laboratory Fails PT, Will the Entire Laboratory Be Prohibited from Performing Testing?

No. The laboratory will be prohibited from performing only those tests falling within the specialty or

subspecialty in which the laboratory failed PT. If other PT was successful, the laboratory may continue to perform those tests.

If Tests Are Performed Only Occasionally, Is PT Required?

Yes. PT is not related to the volume of testing performed.

Where Is a List of Accredited PT Programs Published?

The state laboratory inspecting agency in your state Health Department will maintain a list of accredited PT programs.

ENFORCEMENT

How Does HHS Decide Whether to Impose Sanctions (Suspension, Revocation or Limitation of the CLIA-88 Certificate or Civil Money Penalties) on a Laboratory?

This decision will be based on one or more of the following:

- deficiencies found in certification or validation inspections or through review of materials submitted by the laboratory, and
- unsuccessful participation in proficiency testing.

Will a Laboratory Be Given an Opportunity to Respond to a Notice That Sanctions Are to Be Imposed?

If the deficiencies are determined to pose an immediate threat to the health of the public, the laboratory will have five days notice before sanctions become effective. If no such immediate threat is found, the laboratory will be given fifteen days notice of sanction. The laboratory may submit written evidence or information to oppose the sanction within 10 days of the notice.

What Are the Civil Money Penalties That May Be Imposed on a Laboratory With Deficiencies?

For violations that pose immediate jeopardy to the health of the

public, the range of civil money penalties is from \$3,050 to \$10,000 per day of noncompliance. Other violations face a range of \$50 to \$3,000 per day/

Can a Laboratory Appeal a Civil Money Penalty Decision?

Yes. The laboratory has 60 days from the date of the receipt of the

notice which to request a hearing. If no hearing is requested, HHS may reduce the proposed penalty by 35 percent.

Will Information Concerning Which laboratories Have Been Sanctioned Be Made Available to the Public?

Yes. HHS is required to produce

an annual registry which lists all laboratories against which a sanction has been imposed or legal action taken during the previous year. This Registry will be made available to all physicians and the general public.

OCTOBER 1992

1-2 — *Atlanta: Contraception in the Nineties: Norplant, New Progestines, New Condoms and More.* Category TBD, The Ravina Crowne Plaza, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

1-2 — *Augusta: Advanced Trauma Life Support: Medical College of Georgia Campus.* Category 1. Contact CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

1-3 — *Atlanta: Georgia Chapter of the AAP Fall Meeting.* Category 1 credit 9. Swiss Hotel, Contact William C. Mankin, 4059 Land O'Lakes Drive, Atlanta 30326. PH: 404-237-3922.

2 — *Sawgrass, FL: 5th Annual Symposium on Critical Care and Emergency Medicine.* Category 1 credit. Contact Robert C. Fore, Ed.D., Mercer University School of Medicine, 777 Hemlock Street, Macon, GA 31201. PH: 912-744-1634.

2-3 — *Hilton Head Island, SC: 8th Annual Cardiology for the Practicing Physician — 92.* Category 1 credit 6. Contact Georgia Heart Institute at University Hospital, Augusta, Mary Anne Coussons. PH: 800-344-8545.

2-4 — *Atlanta: Anesthesiology. Hotel Nikko,* Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

3 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

8-10 — *Augusta: Panic and Anxiety. School of Medicine, Medical College of Georgia.* Category 1 credit. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

9-11 — *Hilton Head, SC: Frontiers in Nutrition.* Category 1 credit. Contact Div. of Cont. Ed., MCG, Augusta 30912-1400. PH: 404-721-3967.

10 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

11-15 — *Atlanta: Interventional Radiology for Technologies & Nurses.* Category TBD. Hotel Nikko, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., 30322. PH: 404-727-5695.

17 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

21-23 — *Augusta: Functional Endoscopic Sinus Surgery.* Medical College of Georgia Campus. Category 1 credit. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

29-31 — *Hiwassee: Autumn Primary Care Seminar.* School of Medicine, Medical College of Georgia. Category 1 credit. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

NOVEMBER 1992

6-7 — *Savannah: Update in Cardiology for the Primary Care Physician: The Modern Approach to the Patient with Coronary Artery Disease.* Category 1 credit 5 hours. Contact Melinda L. Burdette, Coor. CME, The Medical Center of Central Georgia, 777 Hemlock Street, Hospital Box 1005, Macon, GA 31201. PH: 912-744-1634.

8-12 — *Dallas, TX: Ninety-Sixth Annual Meeting of The American Academy of Ophthalmology.* Category 1 credit. Contact The American Academy of Ophthalmol-

ogy Meetings Department, P.O. Box 7424, San Francisco, CA 94120-7424. PH: 415-561-8500.

12-14 — *Augusta: Pediatric Advanced Life Support (Instructor and Provider).* Category 1 credit. Medical College of Georgia Campus. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

20-22 — *Atlanta: Scientific Assembly.* Ritz-Carlton Buckhead. Category 1 credit. Contact Medical Association of Georgia. PH: 800-282-0224 or 404-876-7535.

28 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Augusta, GA 30912-1400. PH: 1-800-221-6437 or 706-721-3967.

DECEMBER 1992

7-9 — *Atlanta: Nuclear Medicine Update.* Ritz-Carlton, Buckhead, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., N.E., 30322. PH: 404-727-5695.

JANUARY 1993

29-31 — *Buena Vista Palace, Walt Disney World Resort, Orlando, FL: Twelfth Annual Perspectives on New Diagnostic and Therapeutics Techniques in Clinical Cardiology.* Category 1 credit 12.5 hours. Contact Registration Secretary, Extramural Programs Dept., American College of Cardiology, 9111 Old Georgetown Rd., Bethesda, MD 20814-1699. PH: 800-257-4739 (outside the U.S. and Canada), 301-897-2695, FAX 301-897-9745.

MARCH 1993

19-20 — *Atlanta: Pediatric Orthopaedic Seminar.* Category 1 credit 10 hours. Scottish Rite Children's Medical Center. 1001 Johnson Ferry Road, N.E., Atlanta, GA 30363. PH: (404) 250-2575. 10 CRE credits.



GENERAL INFORMATION

RITZ-CARLTON BUCKHEAD HOTEL

November 20-22
Atlanta

ABOUT THE MEETING

This year's MAG Scientific Assembly features clinical sessions in 11 specialties: emergency medicine, internal medicine, neurology, neurosurgery, obstetrics and gynecology, occupational medicine, ophthalmology, orthopaedic surgery, pathology, plastic surgery and psychiatry. Each of these programs has been arranged by its respective specialty society, with topics and speakers likely to be of most interest and pertinence to society members.

REGISTRATION INFORMATION

Registration for the MAG Scientific Assembly allows a physician to attend any and all CME programs held during the weekend. To register for these scientific meetings, please complete the registration form inserted in this *Journal*, detach it from the hotel reservation form, and mail it with your registration fee to the MAG office.

REGISTRATION FEE

	Before Nov. 9th	After Nov. 9th
MAG Member Physician	\$100	\$125
Non-Member Physician	\$150	\$175

Program Chair or Major Program Presenter	N/C	N/C
Resident Physician/Student	N/C	N/C
Other Health Professional	\$ 50	\$ 75

Cancellations made on or before November 13 will receive a refund minus a \$25 administrative fee. No refunds after November 13.

Program Chairs, and speakers whose presentations are 30 minutes or longer, will not be charged a registration fee.

If you need more registration forms, call the MAG office in Atlanta (404-876-7535 x235) or toll free in Georgia (800-282-0224). We will gladly mail you as many as you need. Early registration is advised. General registration desks will also be open at the Scientific Assembly Friday 8:00 AM-4:00 PM; Saturday 8:00 AM-4:00 PM; and Sunday 8:00 AM-Noon.

LODGING

If you wish hotel accommodations at the Ritz-Carlton, please complete and detach the bottom portion of the registration form and mail it directly to the Ritz-Carlton Buckhead Hotel. Reservations received by the hotel after October 20 will be met on a space-available basis.

PROGRAM OBJECTIVES

The specialty society programs of the MAG Scientific Assembly are intended to provide the practicing physician with current clinical information on pertinent topics. Each of the specialty programs has been planned by a Program Chairman from the respective specialty society, based on the educational needs and interests of his or her colleagues.

EMERGENCY MEDICINE

GEORGIA CHAPTER, AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

Saturday, November 21

Meeting —
8:30 AM-2:30 PM
Luncheon —
12:20-2:30 PM

PROGRAM CHAIRMAN:

Hank Siegelson, M.D.
Education Coordinator
4150 Oakmont Court
Atlanta, Georgia 30021

Saturday Morning

8:30-8:40
**WELCOME AND
INTRODUCTIONS**
8:40-10:00
**TOXINDROMES AND
ANTIDOTES**

10:00-10:30
BREAK
10:30-12:00
**DECONTAMINATION IN
THE ED**

Saturday Afternoon

12:00-12:15
**QUESTIONS, HANDS
ON APPLICATION
OF MASKS**



2:20-2:30
**LUNCH — MEETING OF
GEORGIA COLLEGE OF
EMERGENCY PHYSICIANS**

INTERNAL MEDICINE

GEORGIA SOCIETY OF INTERNAL MEDICINE

Friday, November 21

**Meeting —
8:00 AM-3:00 PM
Luncheon/Business
Meeting 12:30 -1:30 PM**

PROGRAM CHAIRMAN:

Paul D. Webster, M.D.
Medical College of Georgia
Augusta, Georgia

FACULTY:

David M. Zacks, J.D.
Knox & Zacks
Law Offices
1900 Equitable Building
100 Peachtree Street, N.W.
Atlanta, GA

James R. Lyle
Richmond County Medical Society
609 Fifteenth Street
Augusta, GA

Stephen C. Lloyd, M.D.
1333 Taylor Street
Suite 3-H
Columbia, SC

William J. Taylor, Pharm.D.
2713 Edgewood Avenue
Burlington, NC

William N. McClatchey, M.D.
35 Collier Road, NW
Suite 775
Atlanta, GA

Rodney Hornbake, III, M.D.
ASIM Trustee and President
North Carolina Society for Internal
Medicine
1700 St. Delight Church Road
New Bern, NC

Frank M. Houser, Jr., M.D.
1357 Westminster Walk
Atlanta, GA

Saturday Morning

8:00-8:30 AM
REGISTRATION

8:30-9:00
**HOSPITAL PHYSICIAN
RELATIONSHIP**
David M. Zacks, Attorney at Law
Atlanta, Georgia

9:00-9:15
DISCUSSION

9:15-9:45
RBRVS AND CPT CODES
James R. Lyle
Augusta, Georgia

9:45-10:00
DISCUSSION

10:00-10:15
BREAK

10:15-10:45
**MANAGEMENT OF MEDICAL
INFORMATION IN THE
OFFICE AND HOSPITAL**
Stephen C. Lloyd, M.D.
Columbia, SC

10:45-11:00
DISCUSSION

11:00-11:30
**HOME HEALTH CARE,
ASPECTS OF COST**
William J. Taylor, Pharm.D.
Burlington, NC

11:30-11:45
DISCUSSION

11:45-12:15
**COMMENTS REGARDING
HEALTH CARE ISSUES**
William N. McClatchey, M.D.
Atlanta, GA

Saturday Afternoon

12:15-12:30 PM
DISCUSSION

12:30-1:30
**LUNCH AND BUSINESS
MEETING**

1:30-2:00
RODNEY HORNBAKE, III, M.D.
ASIM Trustee and President
North Carolina Society for Internal
Medicine
Bern, NC

2:00-2:30
**PUBLIC HEALTH MATTERS IN
GEORGIA**
Frank M. Houser, Jr., M.D.

2:30-3:00
ROUND TABLE DISCUSSION



NEUROLOGY

GEORGIA NEUROLOGICAL SOCIETY

Saturday, November 21
Meeting —
9:00 AM-3:00 PM
Luncheon —
12:00-1:00 PM

PROGRAM CHAIRMAN:

Noel Holtz, M.D.

President
522 North Avenue
Marietta, Georgia

FACULTY:

Ray L. Watts, M.D.

Associate Professor and Director
Movement Disorders
Program and Center for Age-
Related Neurological Diseases
Department of Neurology
Emory University School of
Medicine
Atlanta, Georgia

Jerrold Vitek, M.D., Ph.D.

Assistant Professor of Neurology
Emory University
Atlanta, Georgia

James Dexter, M.D.

Professor of Neurology
University of Missouri Hospital and
Clinic
Department of Neurology
Columbia, Missouri

Saturday Morning

9:00-10:00

**RECENT ADVANCES IN
PARKINSON'S DISEASE**
Ray K. Watts, M.D.

10:00-10:45

**NEW SURGICAL ABLATIVE
THERAPIES FOR PARKINSON'S
DISEASE AND TREMOR**
Jerrold Vitek, M.D., Ph.D.

10:45-11:00

COFFEE BREAK

11:00-12:00

**SEROTONIN RECEPTORS AND
THEIR PHARMACOLOGY**
James Dexter, M.D.

12:00-1:00

LUNCH

1:00-2:00

**MANAGEMENT OF PROBLEM
PATIENTS**

James Dexter, M.D.

2:00-3:00

**CASE DISCUSSION AND
QUESTIONS AND ANSWERS**

James Dexter, M.D.

We gratefully acknowledge the
support of Sandoz Pharmaceuticals
in sponsoring Dr. Dexter and Parke-
Davis for sponsoring the luncheon.

NEUROSURGERY

GEORGIA NEUROSURGICAL SOCIETY

Saturday November 21
Breakfast —
7:30 AM-9:00 AM
Meeting —
9:00 AM-1:00 PM
Sunday, November 22
Meeting —
9:00 AM-1:00 PM

PROGRAM CHAIRMAN:

Jeffrey J. Olson, M.D.

The Emory Clinic
1327 Clifton Road
Atlanta, Georgia

HONORED GUEST SPEAKER:

To be announced

Saturday Morning

7:30-9:00

**EXECUTIVE COMMITTEE
BREAKFAST MEETING**

9:00-1:00

SCIENTIFIC PROGRAM

Sunday Morning

9:00-12:00

SCIENTIFIC PROGRAM

12:00-1:00

**SOCIOECONOMIC REPORT
AND BUSINESS REPORT**



OBSTETRICS- GYNECOLOGY

GEORGIA OBSTETRICAL AND GYNECOLOGICAL SOCIETY

Friday, November 20
Meeting —
1:00 PM-5:20 PM

PROGRAM CHAIRMAN:

Thomas Nolan, M.D.
OB/GYN Department
Medical College of Georgia
Augusta, Georgia

FACULTY:

Mark J. Messing, M.D.
Assistant Professor, Obstetrics and
Gynecology
Section of Gynecologic Oncology
Medical College of Georgia
Augusta, Georgia

William A. Luten, M.D.
Assistant Professor, Pediatrics
Director of Pediatric and Fetal
Echocardiography Laboratory
Medical College of Georgia
Augusta, Georgia

William Koontz, M.D.
Associate Professor, Obstetrics and
Gynecology
Director of Maternal Fetal Medicine
Middle Georgia Medical Center
Mercer School of Medicine
Macon, Georgia

R. Allen Lawhead, Jr., M.D.
Director of Gynecologic Oncology
Cancer Center of Georgia
Georgia Baptist Medical Center
Atlanta, Georgia

Thomas E. Nolan, M.D.
Program Director
Assistant Professor
Obstetrics, Gynecology and Inter-
nal Medicine
Medical College of Georgia
CJ 120
Augusta, Georgia

Friday Afternoon

1:00-2:00
**ALPHA-FETOPROTEIN
TESTING: IS IT NECESSARY?**
William Koontz, M.D.

2:00-3:00
**FETAL ECHOCARDIOGRAM:
WHAT YOU NEED TO KNOW**
William A. Luten, M.D.

3:00- 3:20
BREAK

3:20-4:20
**THE MEDICAL LLETZ COLLEGE
OF GEORGIA EXPERIENCE**
Mark J. Messing, M.D.

4:20-5:20
**VULVAR SELF-EXAMINATION:
AN EDUCATIONAL PROJECT**
R. Allen Lawhead, M.D.

OCCUPATIONAL AND ENVIRONMENTAL MEDICINE

GEORGIA CHAPTER OCCUPATIONAL MEDICINE

Saturday, November 21
Meeting —
1:00 PM-6:15 PM

PROGRAM CHAIRMAN:

David L. Barnes, M.D., President
Environmental Medicine
Resources, Inc.
4360 Chamblee Dunwoody Road
Suite 202
Atlanta, Georgia

FACULTY:

Fred Gerr, M.D.
Assistant Professor Occupational
and Environmental Medicine
Emory University
1599 Clifton Road, N.E.
Atlanta, Georgia

Richard Letz, Ph.D.
Associate professor
Occupational and Environmental
Medicine
Emory University
1599 Clifton Road, N.E.
Atlanta, Georgia

Keith Blankenship, RPT
Human Performance Center
3620 Eisenhower Parkway
Macon, Georgia



David L. Barnes, M.D.

Senior Vice President Medical Affairs
Environmental Medicine Resources, Inc.
4360 Chamblee Dunwoody Road
Suite 202
Atlanta, Georgia

Saturday Afternoon

1:00-2:00

**CENTRAL NERVOUS SYSTEM
EFFECTS OF OCCUPATIONAL
SOLVENT EXPOSURES**

Fred Gerr, M.D.

2:00-3:00

**CENTRAL NERVOUS SYSTEM
EFFECTS OF OCCUPATIONAL
SOLVENT EXPOSURES**

Richard Lentz, Ph.D.

3:00-4:00

**FUNCTIONAL CAPACITY
EVALUATION/ASSESSMENT IN
INDUSTRY**

Keith Blankenship, RPT

4:00-5:00

**PERSPECTIVES OF A GENERIC
WORKERS' COMPENSATION
SYSTEM — AN ISSUE OF
NATIONAL CONCERN**

David L. Barnes, M.D.

5:00-5:15

BREAK

5:15-6:15

HOSPITALITY SUITE

OPHTHALMOLOGY

**GEORGIA
SOCIETY OF
OPHTHALMOLOGY**

Saturday, November 21

Meeting —

8:30 AM-4:00 PM

PROGRAM CHAIRMAN:

Scott Lambert, M.D.

Emory Eye Center
1327 Clifton Road
Atlanta, Georgia

NOTE: Program planning in process. Please call Dr. Scott Lambert for further information (404) 248-3420.

ORTHOPEDIC SURGERY

**GEORGIA
ORTHOPAEDIC
SOCIETY**

Sunday, November 22

**Current Concepts in the
Management of Tibial
Fractures**

Meeting —

8:30 AM-4:05 PM

PROGRAM CHAIRPERSON:

Mary Jo Albert, M.D.

Assistant Professor, Department of Orthopaedics
Emory University School of Medicine
Chief of Orthopaedic Trauma,
Grady Memorial Hospital
69 Butler Street, S.E.
Atlanta, Georgia

FACULTY:

Lawrence X. Webb, M.D.

Associate Professor
Department of Orthopaedic Surgery
Bowman Gray School of Medicine
Winston-Salem, North Carolina

Peter G. Trafton, M.D.

Associate Professor
Department of Orthopaedics
Brown University
Providence, Rhode Island

George Cierny, III, M.D.

Resurgens Center for Orthopaedic and Sports Care
Clinical Professor of Orthopaedics
Emory University School of Medicine
Atlanta, Georgia

Mary J. Albert, M.D.

Assistant Professor, Department of Orthopaedics
Emory University School of Medicine
Chief of Orthopaedic Trauma,
Grady Memorial Hospital
69 Butler Street, S.E.
Atlanta, Georgia

Thomas J. Moore, M.D.

Assistant Professor
Department of Orthopaedics
Emory University School of Medicine
Atlanta, Georgia



Sunday Morning

8:30- 8:35

WELCOME

Mary J. Albert, M.D.

8:35-9:15

CURRENT CONCEPTS IN THE MANAGEMENT OF CLOSED TIBIAL SHAFT FRACTURES

Peter G. Trafton, M.D.

9:15-9:20

DISCUSSION

9:20-10:00

OPEN TIBIAL FRACTURES — TECHNIQUES AND TIMING OF FIXATION

Larry X. Webb, M.D.

10:00-10:05

DISCUSSION

10:05-10:30

COFFEE BREAK

10:30-11:10

EARLY AND LATE INFECTIONS IN TIBIAL FRACTURES

George Cierney, III, M.D.

11:10-11:15

DISCUSSION

11:15-11:55

LIMB SALVAGE VERSUS AMPUTATION IN SEVERE OPEN TIBIAL FRACTURES

Mary J. Albert, M.D.

11:55-12:00

DISCUSSION

Sunday Afternoon

12:00-1:30

LUNCH

1:30-2:10

SOFT TISSUE COVERAGE AND BONE GRAFTING IN OPEN TIBIAL FRACTURES WITH BONE LOSS

Larry X. Webb, M.D.

2:10-2:15

DISCUSSION

2:15-2:55

NEW CONCEPTS IN THE MANAGEMENT OF PILON FRACTURES

Peter G. Trafton, M.D.

2:55-3:00

DISCUSSION

3:00-3:15

BREAK

3:15-3:55

MANAGEMENT CONCEPTS IN THE TREATMENT OF DELAYED UNIONS AND MAL-UNIONS

Thomas J. Moore, M.D.

3:55-4:00

DISCUSSION

4:00-4:05

CLOSING REMARKS

We gratefully acknowledge the support of Howmedica, AO International Educational Grant, Smith & Nephew Richards, Inc., and EBI Medical Systems for supporting our meeting.

PATHOLOGY

GEORGIA ASSOCIATION OF PATHOLOGISTS ATLANTA SOCIETY OF PATHOLOGISTS

Saturday, November 21

Meeting —

9:00 AM-12:00

Luncheon —

12:00 PM-2:00 PM

Sunday, November 22

Meeting —

9:00 AM-3:00 PM

Luncheon —

12:00-1:30 PM

PROGRAM CHAIRPERSONS:

Peter Klacsmann, M.D.

President GAP
Atlanta, Georgia

Jan Kennedy, M.D.

President GAP
Atlanta, GA

FACULTY:

Patricia E. Saigo, M.D.

Chief, Cytopathology Service
Memorial Sloan-Kettering Cancer Center
New York, New York

Christopher P. Crum, M.D.

Director, Women's and Perinatal Pathology
Brigham and Women's Hospital
Department of Pathology
75 Frances Street
Boston, Massachusetts



Peter Klacsmann, M.D.

Pathologist
University Hospital
Augusta, Georgia

Patrick David Kearns, M.D.

Pathologist
Southeastern Pathology, PC
Rome, Georgia

Jeffery W. Byrd, M.D.

Director of Laboratories
J. D. Archbold Hospital
Thomasville, Georgia

George Birdsong, M.D.

Assistant Professor
Department of Pathology and
Laboratory Medicine
Emory University
Atlanta, Georgia

Saturday Morning

9:00-10:30

CHALLENGES IN CERVICAL-VAGINAL CYTOLOGY

Patricia E. Saigo, M.D.

10:30-11:00

COFFEE BREAK

11:00-12:00

TOPIC CONTINUED

12:00-2:00

LUNCH

Saturday Afternoon

2:00-3:15

ROUNDTABLE DISCUSSION — CURRENT ISSUES IN GYNECOLOGIC CYTOLOGY

Peter Klacsmann, M.D.

(Moderator)

Patricia E. Saigo, M.D.

Patrick David Kearns, M.D.

Jeffery W. Byrd, M.D.

George Birdsong, M.D.

3:30-4:00

BUSINESS MEETING

Sunday Morning

9:00-10:30

CURRENT TOPICS IN GYNECOLOGIC PATHOLOGY

Christopher F. Crum, M.D.

10:30-11:00

COFFEE BREAK

11:00-12:00

TOPIC CONTINUED

Sunday Afternoon

12:00-1:30

LUNCH

1:30-3:00

TOPIC CONTINUED

Christopher P. Crum, M.D.

We gratefully acknowledge the support of SmithKline Beecham Clinical Laboratories, Inc. for their financial support for Saturday's session.

PLASTIC SURGERY

GEORGIA SOCIETY OF PLASTIC SURGEONS

Friday, November 20

Meeting —

1:00-5:00 PM

Saturday, November 21

Meeting —

9:00 AM-1:00 PM

Luncheon —

1:00-2:00 PM

PROGRAM CHAIRMAN:

W. Jefferson Pendergrast, Jr., M.D.

Program Chairman
Georgia Society of Plastic Surgeons
Atlanta, Georgia

FACULTY:

G. W. Anastasi, M.D.

Professor and Chief
Department of Plastic Surgery
Boston University Medical Center
Boston, Mass.

Walter L. Erhardt, Jr., M.D.

Chairman, Socioeconomic Committee
American Society of Plastic and Reconstructive Surgeons
Albany, Georgia

Karen A. Zupko

President, KarenZupko & Associates
Chicago, Illinois



Karen M. Wood, MBA, MHA, MS
Consultant
The Physicians Consulting Group,
Inc.
Atlanta, Georgia

Friday Afternoon

1:00-5:00

HOW TO SURVIVE THE FUTURE — ASSESSING YOUR PRACTICE, STRATEGIC PLANNING AND IMPLEMENTATION

Karen A. Zupko, President, Karen Zupko and Associates
Karen M. Wood, MBA, MHA, MS
Walter L. Erhardt, Jr., M.D. (Moderator)

Saturday Morning

9:00-1:00

RISK MANAGEMENT

G. W. Anastasi, M.D.

Saturday Afternoon

1:00-3:00 PM

LUNCHEON

GEORGIA SOCIETY OF PLASTIC SURGEONS

E. Anthony Musarra, II, M.D.,
President (Speaker)

PSYCHIATRY

GEORGIA PSYCHIATRIC PHYSICIANS ASSOCIATION

Friday, November 20
Meeting —
8:30 AM-12:00PM

PROGRAM CHAIRMAN:

Richard A. Fields, M.D.
President
Georgia Regional Hospital at
Atlanta
3073 Panthersville Road
Atlanta, Georgia

FACULTY:

Richard L. Elliott, M.D., Ph.D.
Medical Director
Georgia Department of Human
Resources
Division of Mental Health, Mental
Retardation and Substance Abuse
878 Peachtree Street, N.E.
Atlanta, Georgia

James W. Mimbs, M.D.
Associate Professor of Psychiatry
Mercer University
Chief Medical Officer
Central State Hospital
P.O. Box 15
Milledgeville, Georgia

Thomas W. Hester, M.D.

Medical Director
Substance Abuse Services
Georgia Department of Human
Resources
Division of Mental Health, Mental
Retardation and Substance Abuse
878 Peachtree Street, N.E.
Atlanta, Georgia

Friday Morning

8:30-9:15

PRACTICAL MENTAL HEALTH ASPECTS OF MEDICAL PRACTICE

Richard L. Elliott, M.D., Ph.D.,

9:15-9:30

QUESTIONS AND ANSWERS

9:30-10:15

TOPIC CONTINUED

James W. Mimbs, M.D.

10:15-10:30

QUESTIONS AND ANSWERS

10:30-11:15

TOPIC CONTINUED

Thomas W. Hester, M.D.

11:15-12:00

GROUP PANEL DISCUSSION ON PUBLIC SECTOR ISSUES



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1992 MAG Scientific Assembly

November 20-22, 1992

THE RITZ-CARLTON BUCKHEAD HOTEL, ATLANTA

Please Print or Type

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CHECKS SHOULD BE MADE PAYABLE TO
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Payment must accompany this form. Cancellations made on or before November 13 will receive a refund minus a \$25 administrative fee. NO refunds after November 13.

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Medical Association of Georgia
Scientific Assembly
November 20-22, 1992

Reservations must be received by October 20, 1992.

Rates

If rate requested is not available, nearest rate will be reserved.

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☐ 6 pm arrival

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Physicians Against World Hunger

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CITY

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Please forward your tax deductible contribution to Physicians Against World Hunger #2 Stowe Road, Peekskill, NY 10566

Tanya's baby

motionless

premature baby locked in a primal

HIV-tainted embrace

... I feel no pity

laser eyes

averted to the wall

seering holes at points of contact

... they don't burn me

tears roll down

an emotionless face

and singularly drip to the floor

... they don't touch me

undertow

from self-destruction's raging tide

dragging a newborn soul to the brink of hell

... as I withdraw from the edge

tears of remorse

repentance or sorrow?

perhaps just tears of self-pity?

... I think not

more likely the overflow

of twenty years of hopelessness

internally vaporized by cocaine-fire

... I shield my face from its heat

externally condensing

on exposure to icy hatred

of all that she has become

... and me

LINDA M. SACKS, MD

Neonatologist, Savannah

PHYSICIAN WANTED

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ADVERTISING INDEX

American Medical Association	482, 508, 532
American Medical Writers Association	531
Classified Advertisement	527
CompHealth	461
G.D. Searle & Company	532
Health Quip, Inc.	461
The Kirwan Companies	478
Lilly, Eli & Company	531
MAG Mutual Insurance Company	453
Palisades Pharmaceuticals, Inc	454
Paine Webber	452
Physicians Against World Hunger	525
ProSoft Development, Inc.	472
Trupp Hoddnett Enterprises	454
U.S. Air Force	485
U.S. Army Active	488
U.S. Army Reserve	498

MANUSCRIPT INFORMATION

MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely in this *Journal*. Manuscripts should be typewritten, double-spaced, and the original and one copy should be submitted. Receipt of manuscripts will be acknowledged.

STYLE — In general, articles can be 8-10 pages in length. For exceptional circumstances, contact the Managing Editor. Footnotes, bibliographies, and legends should be typed on separate sheets, double-spaced. Bibliographies should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages.

Sorter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

ILLUSTRATIONS — Illustrations must be submitted in duplicate. Illustrations, tables, etc., should bear the author's name and figure number. Used photographs, drawings and cuts will be returned after publication only if requested. The cost of reproduction of illustrated material for publication in excess of three average illustrations and/or tables will be borne by the author, and the *Journal* will bill the author for this expense.

GENERAL POLICY — Authors will be given as wide a latitude as the general policy of the *Journal* and the demands on its space permit. The right to reduce, revise, or reject any material submitted for publication is always reserved. The *Journal* is not responsible for statements made by any contributor. All communications regarding editorial, advertising, subscription, and miscellaneous matters should be sent to the Managing Editor, 938 Peachtree Street, N.E., Atlanta, GA 30309-3990.

ADVERTISING — All pharmaceutical advertising must be approved by the State Medical Journal Advertising Bureau, Inc., to be acceptable for publication. Other advertising copy may be accepted subject to the approval of the Editor. All copy or negatives must reach the *Journal* office by the 25th of the month 2 months prior to publication. General and classified advertising rates will be furnished on request.

MEDICAL EDITING SERVICES — If in the opinion of the *Journal* Editorial Board, material submitted for publication could be improved by a Medical Editing Service, the Editor will contact the author for his or her approval. Association members needing assistance in preparation of material for publications may also use this service. A reasonable charge is made for this service and the cost of this will be borne by the author.

TEAR OUT — Give this application to a non-member colleague.

MEDICAL ASSOCIATION OF GEORGIA / COMPONENT

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NAME _____
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Date

_____ Date

_____ Date

_____ ECFMG#

EXPECTED RESIDENCY PROGRAM COMPLETION DATE: (if resident) _____

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Date

HOSPITAL AFFILIATIONS: _____

(1)

(2)

(3)

TEACHING APPOINTMENTS: _____

Date

MILITARY: _____

Branch

Dates

Rank

Branch

Dates

Rank

PREVIOUS STATE MEDICAL SOCIETY MEMBERSHIPS _____

ARE YOU A CURRENT AMA MEMBER? _____ YES _____ NO LAST YEAR PAID: _____

Within the last 5 years, have you been convicted of a felony crime? () Yes () No If yes, please provide full information.

Within the last 5 years, has your license to practice medicine in any jurisdiction been limited, suspended or revoked?
() Yes () No If yes, please explain.

Within the last 5 years, have you been the subject of any disciplinary action by any medical society or hospital staff?
() Yes () No If yes, please explain.

If elected to membership, I agree to conduct myself professionally and personally according to the principles of medical ethics and to be governed by the Constitution and Bylaws of the county society, the Medical Association of Georgia and the American Medical Association.

I hereby release, and hold harmless from any liability or loss, the _____
Medical Society, and the Medical Association of Georgia, their officers, agents, employees, and members, for acts performed in good faith and without malice in connection with evaluating my application and my credentials and qualifications, and hereby release from any liability any and all individuals and organizations, who, in good faith and without malice, provide information to the above named organizations, or to their authorized representatives, concerning my professional competence, ethical conduct, character and other qualifications for membership.

County Sponsor's Signature*

Applicant's Signature

County Sponsor's Signature*

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AMWA
AMERICAN
MEDICAL WRITERS
ASSOCIATION

The AMA and Medical Liability: Principles of Reform

The American Medical Association believes that as the national debate on health care reform proceeds, we must address its high cost, inefficiency and inequity of our medical liability system.

The Problem

People injured by medical malpractice or defective medical products are entitled to fair and prompt compensation for their injuries. All parties should have the right to fair and cost-effective dispute resolution. The AMA believes that in resolving medical and product liability claims, the civil justice system currently:

- Costs too much and works slowly;
- Fails to provide access to the legal system or fair compensation to most patients, while providing exorbitant awards to others;
- Is unable to promptly or cost-effectively identify unfounded claims;
- Fails to promote quality health care or protect patients from avoidable injuries;
- Adds billions annually to the national health care bill in medical liability premium costs and by encouraging doctors to practice "defensive medicine" to hedge against potential lawsuits;
- Threatens access to health care, especially high risk services, such as obstetrics and emergency room care;
- Unnecessarily adds to the cost of pharmaceuticals and medical devices, and
- Inhibits health care product research and development, reducing the availability of potentially valuable new drugs and medical devices.

The impact of our medical liability system has been studied extensively. These studies agree that this inefficient system adds to the serious problems of making health care services available to all and making these services cost-effective.

The federal government, as the single largest purchaser of health care services, has a strong interest in promoting available and quality medical

care and managing its cost. Because of that concern, it should take the lead to address medical liability problems.

Principles of Medical Liability Reform

The over 100 groups including the AMA that participate in the **National Medical Liability Reform Coalition** support the principles articulated below. These principles should guide any restructuring of the current medical liability system.

1. Availability of Health Care:

A compensation system for medical injury should promote the basic goal of providing access to all necessary health care service to all.

2. Quality of Health Care:

A compensation system for medical injury should deter substandard or unethical practices and encourage improvements in the safety and quality of medical care.

3. Patient-Professional Relationship:

A compensation system for medical injury should enhance a cooperative relationship between patient and providers, based on mutual respect and effective communication.

4. Fair Compensation:

A compensation system for medical injury should compensate patients injured by malpractice adequately and equitably.

5. Prompt Resolution: A compensation system for medical injury should resolve claims promptly.

6. Innovation: A compensation system for medical injury should encourage innovation in diagnosis and treatment, leading to better care.

7. Predictability: A compensation system for medical injury should provide predictable outcomes with respect to findings of liability and amount of awards.

8. Cost Effectiveness: A compensation system for medical injury should operate efficiently and economically.

We urge the Congress and the President to work on meaningful medical liability reform legislation consistent with the above principles.

LETTERS TO EDITOR

Dear Editor,

From time to time, I note the excellent professional quality of the articles in the Journal and appreciate the artwork on the covers. The August issue has a particularly appealing article to me as a pediatrician. Having worked with clinical trials on the first home monitor available to parents back in the early 70s, I was particularly interested in Dr. Joseph Burton's article entitled "Investigating SIDS and Other Infant Deaths." I have heard Dr. Burton talk on several occasions about many different aspects of his post mortem examinations, and I am glad to see his article concerning the importance of SIDS investigation appear in our MAG Journal.

Thanks again for offering the physicians of Georgia such a wide range of interesting articles each month.

*Sincerely,
W. Scott James, MD
Chief of Pediatrics
The Southeast Permanente
Medical Group, Inc.
Atlanta*

Dear Editor,

My hearty congratulations to you and the staff of the Journal in regards to the July issue. This issue is a superb combination of current news items, articles of general interest, auxiliary news and activity, and a report of the 1992 annual session. . . . and all of this on a very restricted budget!

Good going, Charlie.

*Sincerely,
E.M. Molnar, MD
General Surgeon, Columbus*

Dear Editor,

I just want to congratulate you on the September, 1992, issue of the *Journal*. It is one of the best journals that you have put out in the four years I have been back in Georgia practicing. I think the articles are timely and they are especially insightful.

Again, my compliments to you and your staff.

*Sincerely,
C. Allen Woods, MD
Gastroenterologist, Valdosta*

Dear Editor,

Senator Wyche Fowler says there have been band-aids applied to health care.

If so, they have been applied by the government, of which he is one.

The surgery then needs to be to cut the government out of the doctor-patient relationship. Third parties only want all the money they can extract from the system — the patient and the doctors.

Regulation in this republic has increased the cost of health care and medical care (doctors practice medicine, everybody else does health care!) astronomically. The doctors get less, the patients get less and the government employees (the bureaucracy) and the third parties (insurance moguls and

those taking advantage of the system) are reaping untold wages and profits.

Let us go forward by freeing the patients and the doctors to settle between themselves what the fees will be. It would eliminate the power struggle for the patient's and the doctor's dollar, to the betterment of all.

*Yours sincerely,
Robert M. Webster, MD
Internal Medicine, Fairburn*

Dear Editor,

Thanks for the September issue of the MAG Journal. Even though the medical-legal issues don't involve me now, still I have some thoughts about it.

Fee-for-service still maintains good physician-patient relationships. Rapport is what counts. The method of payment can be handled directly or through medical insurance which could be supplemental to Medicare where applicable. Patient and family must know if their physician will accept Medicare and supplemental medical insurance as total payment. Fortunately, I'm not familiar with third party involvement.

As to malpractice premiums, they were never sky high during my active pediatric practice, 1953-1977.

*Sincerely,
Henry Gall, MD
Retired, Life Member*

Are We Too Busy?

The following remarks are based on comments by GMCF Medicare reviewers, all of whom are in active medical practice in Georgia.)

CONSCIENTIOUS doctors wish to treat their patients as whole persons and fellow human beings. Prudent and conscientious doctors will have carefully included in the hospital record the reasoning which preceded their actions, particularly where decisions seem to be at variance with good judgement. Are there overriding considerations making this action reasonable despite the patient's advanced age, diabetes, peripheral vascular disease or history of bleeding tendency? If so, these considerations should be explicit in the record. Similarly, if there are good reasons why the usual course of action is inappropriate, the hospital record should indicate why. It may seem to the reviewer that a procedure, whether surgical or diagnostic, is performed because an excuse to do so has been found. The decision seems to have been made without regard to the whole clinical setting. The reviewer wonders: Have this patient's age, mental status, chronic illnesses, potential for improvement, and operative risks been fully assessed? Has the risk benefit

ratio been fairly calculated? For whose benefit is this action being taken? Despite the fact that an informed consent has been signed, does the patient and family really understand the likelihood of "success" may consist of? Do they understand the cost in terms of pain, recovery time, possible complications, as well as of risk of the procedure?

At times when the admission is by someone other than the patient's "regular doctor," and is for the sole purpose of doing a particular procedure, the admitting physician seems to assume the role of a technician. In fact, in letters of additional documentation to GMCF, such physicians often describe themselves in this way.

In this age of specialization and subspecialization, and regardless of the specificity of the role one has been assigned, responsibility is for the whole patient. The medical record should reflect awareness of this responsibility. If the physician is too busy to do this, he or she is too busy.

When a practitioner is frequently called on by fellow physicians to provide a particular service, there seems to be a tendency to relax adherence to the strict indications, and con-

tra-indications, for that service. There is also the temptation to less fully document those indications and contra-indications. Such documentation should not be regarded solely as a convenience for the peer reviewer or as a means of disappointing the prying lawyer. The very exercise of recording the reasons for actions contemplated forces the physician to face up to the needs of that particular patient and can help assure that the right decision is being made.

We owe it to our profession to protect it from dehumanizing influences which threaten it. Technology, subspecialization, the "team concept" of medical care, computerization, complex payment systems all make important contributions to high quality patient care, but they have the capacity — misused — to reduce the patient to a cipher. As doctors of medicine, we must prevent this by continuing to examine our own motivations, decisions and actions and by making these considerations, where appropriate, a part of the medical record.

(Reported by Dan Burge, MD, Associate Medical Director — Special Projects, Georgia Medical Care Foundation, 57 Executive Park South, Suite 200, Atlanta GA 30329; 404-982-7524. Direct inquiries to him.)

The following represents highlights of the Medicare Advisory Committee Meeting between the Medical Association of Georgia and Aetna on Sept. 2, 1992, in Savannah.

Visit Code Letters

On August 1, approximately 2200 letters were sent by Aetna Medicare to 1400 physicians concerning the coding levels which were used on office and hospital visits in comparison with other physician peers. Those physicians whose coding practices which appeared to be outside the norm were simply notified of this trend. Aetna received over 500-600 phone calls and 100 letters from physicians in response to the mailing. Some of the problems were related to the old specialty designation problem, where some physicians were still listed in the wrong specialty. Many of these are being corrected. Aetna emphasized that these were educational letters only and that they had no plans for doing anything further. Many of the explanations received from physicians were clear logical ones for the codes they used. The second or follow-up letter that traditionally is sent out is now on hold.

Specialty Designation

Aetna reminded the Committee that on March 1 they sent out a specialty designation survey to physicians in order to update their files. Because of the great confusion on specialty designation, Aetna has decided to go to just one specialty. This has now been completed. They stated there was now no reason for a second specialty listing, since the rates are now standard with RBRVS. It could, however, affect aberrancies in other activity reports. Aetna states it will have to look at the explanations on a case by case basis.

Profile Update

On October 15, Aetna will begin work on developing the 1993 fee schedule. It must be completed between October 15 and November 16 when the annual "Dear Doctor" letter and disclosure of the 1993 fee schedule will occur. Medicare carriers were given 3 options on the mailing of the schedule: 1) Physician specific fees of those frequently used; 2) A full fee schedule for all codes; and 3) A combination of the two. Aetna has chosen to do #2 or a full fee schedule which includes all limiting charges.

On January 1, there will be an update of the HCPCS codes and CPT. HCFA will supply all data on the new allowances. HCFA's base data will be used by Aetna to develop the transition calculations. New codes will also be included with their new allowances. October 31 is the final date for Congress to act on Medicare fee matters.

Clinical Labs

The new CPT codes for clinical labs will be in effect on April 1 instead of January 1, 1993. On September 7, the Medicare Explanation of Benefits began containing messages stating that all claims to HCFA must have the clinical lab certification number on them. Claims will be edited to see if the number is on file with HCFA and then sent to the Common Working File. Interestingly, though, it is still unclear where the CLIA number will go on the claim form. More bureaucratic blunders? MAG will be sending out an emergency newsletter on the CLIA information during the next week.

Evaluation and Management Code Monitoring

Aetna reported that they have completed the educational monitoring of the use of the Evaluation

and Management (E & M) codes. From monitoring done from January 3, 1992, through July 10, 1992, Aetna reports that 543 educational letters were sent with approximately 372, or 68.5%, of letters received in response with explanation and documentation. Letters in which Aetna felt correct coding was done included 316, or 85%; coding guidance letters related to a difference of opinion in the use of the codes made included 56 letters for about 15%. The letters sent related to the following codes: 26 letters sent for notice to downgrade code 99213 to 99212; 15 letters for 99214 to 99213; 2 letters for 99232 to 99231; 5 letters for 99215 to 99214. Three letters were sent to upgrade code 99213 to 99214. Aetna agreed that the CPT code instructions were not clear resulting in much confusion in the proper use of the codes.

MAG asked for clarification on the CPT codes concerning telephone calls and was told no compensation was available. It was also made clear that physicians could not bill patients for telephone calls since this is covered under the office visit service by Medicare. MAG emphasized the great financial losses suffered by doctors' practices due to the many telephone calls. There was some discussion about remedying this problem at the national level.

MED-PARD

Aetna state the MED-PARD Directory will be again published on February 26, 1993. The Directory is a listing of participating physicians in Medicare.

The next meeting of the Medicare Advisory Committee will be on October 21, 1992, at 10:30 am in Savannah. The larger committee including all specialties will meet on Nov. 4 in Savannah.

(Reported by Cam Taylor, MAG's Director of Medical Practice.)

OCTOBER 1992

26-30 — *Sarasota, FL — Hyatt Hotel.* **Pediatric Emergency Medicine** (8:00 a.m.-Noon). Category 1 credit 20. Pediatric Emergency Medicine. American Medical Seminars, Inc. and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

29-31 — *Hiawassee:* **Autumn Primary Care Seminar.** School of Medicine, Medical College of Georgia. Category 1 credit. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

NOVEMBER 1992

2-6 — *Sarasota, FL — Hyatt Hotel.* **Oncology for Primary Care and Internal Medicine** (8:00 -Noon). Category 1 credit 20 credits. American Medical Seminars, Inc. and Temple University. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

5-6 — *San Diego, CA — San Diego Convention Center.* **First Interdisciplinary World Congress on Low Back Pain and Its Relation to the Sacroiliac Joint.** Category 1 credit 15. Contact UC San Diego School of Medicine. PH: 619-534-3940; FAX: 619-534-7672.

6-7 — *Savannah:* **Update in Cardiology for the Primary Care Physician The Modern Approach to the Patient with Coronary Artery Disease.** Category 1 credit 5 hours. Contact Melinda L. Burdette, Coor. CME, The Medical Center of Central Georgia, 777 Hemlock St, Hospital Box 1005, Macon, GA 31201. PH: 912-744-1634.

8-12 — *Dallas, TX:* **Ninety-Sixth Annual Meeting of The American Academy of Ophthalmology.** Category 1 credit. Contact The American Academy of Ophthalmology Meetings Department, P.O. Box 7424, San Francisco, CA 94120-7424. PH: 415-561-8500.

9-12 — *Scottsdale, AZ — The Registry Resort.* **Update in Clinical Medicine.** Category 1 credit 22. American College of Physicians Postgraduate Courses. Contact Susan Racnelli. PH: 800-589-8900.

12-14 — *Augusta:* **Pediatric Advanced Life Support (Instructor and Provider).** Category 1 credit. Medical College of Georgia Campus. Contact Div. of CME, Medical College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

15-18 — *Boston, MA — The Ritz-Carlton Hotel:* **Broadening the Skills of the General Care Internist.** Category 1 credit 21. American College of Physicians Postgraduate Courses. Contact Susan Racnelli. PH: 800-589-8900.

13-15 — *Atlanta:* **Tourette Syndrome Association Southeast Regional Conference.** Category 1 credit 4.2. Contact Cliff Williams, Scottish Rite Children's Medical Center 404-250-2442 or Jeannie Taylor, Tourette Syndrome Association, Inc. of Georgia 404-266-9531 or 404-972-6392.

16-20 — *Sarasota, FL — Hyatt Hotel:* **Topics in Emergency Medicine (1) Emergency Radiology (2) Risk Management** (8:00 a.m. - Noon). American Medical Seminars, Inc. and Temple University School of Medicine. Category 1 credit 20. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766

20-22 — *Atlanta:* **Scientific Assembly.** Ritz-Carlton Buckhead. Category 1 credit. Contact Medical Association of Georgia. PH: 800-282-0224 or 404-876-7535.

23-27 — *Sarasota, FL — Hyatt Hotel:* **A Practical Approach to the Evaluation and Differential Dx. of Common Neurological Complaints** (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc. and Temple University

School of Medicine. Contact Dagmar Pierce. PH: 813-388-1766.

28 — *Athens:* **Football Saturday Seminars.** Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

30-Dec. 4 — *Sarasota, FL — Hyatt Hotel:* **Update and Review of Sexually Transmitted Diseases** (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc. and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

DECEMBER 1992

7-11 — *Sarasota, FL — Hyatt Hotel:* **Update and Review of Pediatrics for Practitioners and Emergency Medicine** (8:00 -Noon). Category 1 credit 20. American Medical Seminars, Inc. and Temple University School of Medicine. Contact person Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

7-9 — *Atlanta:* **Nuclear Medicine Update.** Ritz-Carlton, Buckhead, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., NE, 30322. PH: 404-727-5695.

21-24 — *Sarasota, FL — Hyatt Hotel:* **Clinical Endocrinology and Metabolic Disease A Comprehensive Review** (9:00 a.m.-1:00 p.m.) Category 1 credit 20. American Medical Seminars, Inc. and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

28-31 — *Sarasota, FL — Hyatt Hotel:* **Update in Infectious Diseases** (8:00 a.m.-1:00 p.m.) Category 1 credit 20. American Medical Seminars, Inc. and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

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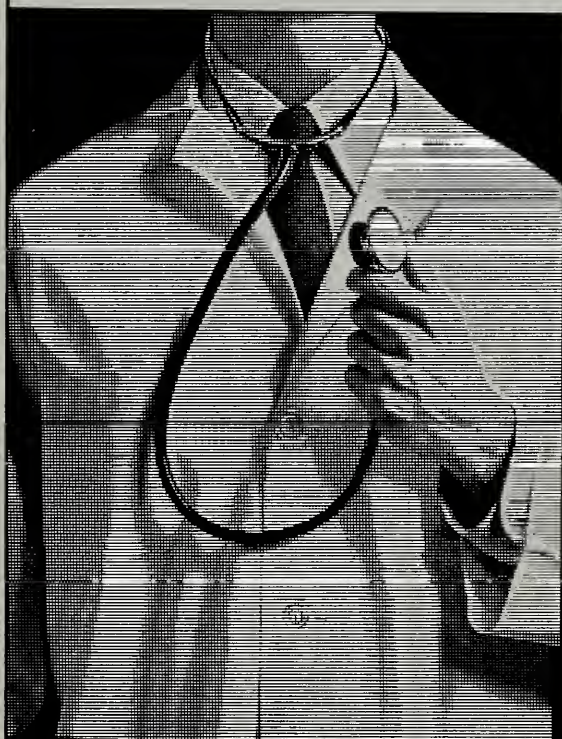


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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage, although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

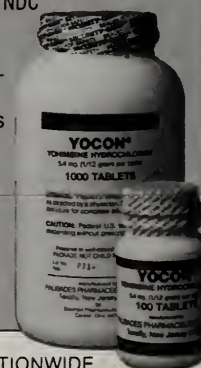
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27-2, July 4 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Physician Recognition Award Recipients January-July, 1992

LISTED BELOW are those physicians in Georgia who have earned the AMA's Physician Recognition Award (PRA), January through July. The award was established in 1968 "To recognize, encourage, and support physicians who participate regularly in continuing medical education and to emphasize the importance of developing more meaningful continuing medical education opportunities for physicians."

A minimum of 150 credit hours of CME must be earned over a 3-year period to qualify for the Award. The hours may include such activities as conferences, residencies, teaching, writing, private reading, listening to cassettes, home study courses, consultation, and peer review. At least 60 hours must be from formal CME programs sponsored for Category 1 credit by organizations accredited for these activities.

We congratulate the following physicians who have distinguished themselves and their profession by their commitment to continuing education:

Larry L. Ackerman, *Savannah*
James Malcolm Alday, *Gainesville*
Earl Lewis Alderman, *Atlanta*
Catherine S. Andrews, *Kennesaw*
Helen Liuben Bachvarov, *Marietta*
Jenj Carson Barnard, *Vidalia*
John Peale Bent, *Martinez*
Bruce Allen Bergherm, *Atlanta*
Douglas Ronald Bess, *Atlanta*
Sunil Bhole, *Alpharetta*
Reid Bruce Blackwelder, *Trenton*
William Frank Bloom, *Macon*
James Larry Boss, *Villa Rica*
Bonnie Leah Brinson, *Oglethorpe*

Paul Collins Broun, *Americus*
Douglas Guy Browning, *Columbus*
Dennis Gaines Bullock, *Commerce*
William R. Camp, *Atlanta*
Howard Neil Caplan, *Hardwick*
Raymond Lee Capps, *Rome*
David Lynn Childs, *Rome*
Larry V. Clements, *Marietta*
Angel Manuel Cobiella, *Mableton*
Craig Addison Cole, *Winder*
Chappell A. Collins, *Albany*
John Coleman Connelly, *Columbus*
David Martin Connuck, *Augusta*
William T. Cook, *Atlanta*
Danny Ross Copeland, *Moultrie*
Dianna S. Cornell-Murphy, *Marietta*
Debora Lou Coursey-Prah, *Peachtree City*

John H. Culbertson, *Atlanta*
Gary Mark Daniels, *Marietta*
Glenda Hawkins Davis, *Nashville*
Lewis Marion Davis, *Atlanta*
Bradley Douglas Delay, *Dalton*
James Franklin Densler, *Atlanta*
Pierce Kendal Dixon, *Gainesville*
Edward Farmer Downing, *Savannah*
Adrian Dominick Duffy, *Columbus*
Fred Joseph Dunhon, *Norcross*
Ruth Ann Dunn, *Decatur*
Steven Jay Eisenberg, *Atlanta*
David D. Ellis, *Fort Gordon*
Raymond Charles Evans, *Tifton*
Paul D. Feldman, *Riverdale*
Stanley Mark Fineman, *Marietta*
Thomas V. Foster, *Columbus*
William F. Freeman, *Warner Robins*
Kenneth A. Fuller, *Thomasville*
Patrick Edward Galvas, *Lithonia*
Raj Kumar Gandhi, *Atlanta*
Frederick E. Gilbert, *Newnan*
Stewart Dixon Gilbert, *Tifton*
Richard Stephen Gitomer, *Atlanta*
Thomas Franklin Glass, *Macon*
Paul Jason Glass, *Tucker*
William Walter, *Goodhue, Fort Gordon*

Carey Wheeler Goodman, *Augusta*
Stephen Winslow Gordon, *Atlanta*
Henry Cameron Gorman, *Martinez*
Ralph Perry Grant, *Atlanta*
Ray J. Grant, *Forsyth*
David Greene, *Atlanta*
Howard A. Griffin, *Waycross*
James Duane Grooms, *Brunswick*
Alexander Steven Gross, *Decatur*
Linda Denise Guydon, *Atlanta*
James Raleigh Hagler, *Buena Vista*
W. David Hammad, *Atlanta*
James S. Harvey, *Marietta*
Darvin L. Hege, *Atlanta*
Randal Hollis Henderson, *Tucker*
Louis Jack Herskowitz, *Austell*
Julius Napoleon Hill, *Atlanta*
John L. Holcombe, *Dallas*
Allen Henry Hord, *Atlanta*
Arden Luther Hothem, *Gainesville*
Vernon Neal Houk, *Atlanta*
George Arthur Jack, *Atlanta*
Norman Frederick Jacobs, *Decatur*
Kurt Edward Jacobson, *Columbus*
Carl David Johnson, *Tifton*
James Herbert Johnson, *Columbus*
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Robert Mainor, *Smyrna*
Richard Michael Majeste, *Dunwoody*

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 David Eugene Martin, *Marietta*
 Roger Pierce Martin, *Gainesville*
 Yvonne P. McAllister, *Macon*
 John Davis McArthur, *Lyons*
 Sean Francis McCue, *Macon*
 Harry Cledson McDonald, *Toccoa*
 John Alexander McPhail, *Savannah*
 Eduardo Montana, *Marietta*
 David Keith Moore, *Cleveland*
 Malcon Sidney Moore, *Macon*
 William Jacob Morton, *Atlanta*
 Foad Nahai, *Atlanta*
 Edward Oliver Nix, *Tucker*
 Timothy Francis Nolan, *Atlanta*
 Abiodun O. Obadina, *Decatur*
 Shi Han Oh, *LaGrange*
 Carlos Ordonez, *Dunwoody*
 Judy Inez Orosz, *Martinez*
 Magdy Ahmed Osman, *Savannah*
 John Anthony Page, *Macon*
 Robert George Palerino, *Adel*
 Ramesh V. Patwardhan, *Savannah*
 Gary Lynn Petry, *Lilburn*
 Richard J. Pierzchajlo, *Tifton*
 Edwin Currier Pound, *Atlanta*
 Danae Maria Powers, *Atlanta*
 Edgar Bertram Powers, *Norcross*
 Oscar Prada, *Dublin*

Louis Michael Prisant, *Augusta*
 Dent Wiley Purcell, *Savannah*
 James Michael Quayle, *Alpharetta*
 Sanjeeva Rao, *Jackson*
 Susan Roberta Raybourne, *Macon*
 Raymond Joseph Reid, *Tallapoosa*
 Robert B. Remler, *Savannah*
 Daniel Carl Rendleman, *Atlanta*
 John William Richards, *Martinez*
 Paul Richter, *Riverdale*
 Donald Ray Robinson, *Bainbridge*
 Bruce Sabatino, *Tifton*
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 Lloyd B. Schnuck, *Savannah*
 Robert Drville Schoffstall, *Macon*
 Robert Lowell Schwin, *Atlanta*
 Ted A. Scoggins, *Lafayette*
 D. Gamimi Seneviratne, *Columbus*
 Zoran Ivanovic, *Senoia*
 George William Shannon, *Columbus*
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Digesting Government's Regulatory Alphabet Soup

Gary Matthews

WHAT A YEAR 1992 has been. The year is only three-fourths over, and there has already been an avalanche of governmental regulations challenging physicians in the form of ubiquitous regulatory acronyms and "initialisms." RBRVS, OSHA, CLIA, ADA, and UPIN have all been implemented during 1992. Adding to the consternation of physicians, the familiar regulatory acronyms enjoying new regulatory zeal, are IRS and OIG (Office of the Inspector General).

Physicians have found the problem of digesting the regulatory soup often to be much more disconcerting than heartburn. Because, although easy to say, these simple acronyms carry the force of changing the way physicians now and will forever practice medicine.

Although 1992 is the targeted year for the beginning of the implementation process, the origins date back a few years ago. RBRVS was shaped in OBRA '89 and '90. The Clinical Laboratory Improvement Act of 1988 was the base legislation for the current CLIA regulations, and the Americans with Disabilities Act originated in 1990. As you probably know, significant amounts of legislation containing regulatory constraints and mandated compliance are currently being drafted and legislated and will most likely be implemented within the next 2 to 3 years.

In other words, unless physicians

‘These simple acronyms carry the force of changing the way physicians now and will forever practice medicine.’

take strong actions, as individual practitioners collectively, through the political lobbying power of organized medicine, and as proactive practice owners and executives, it won't get any better than this.

Let's examine what physicians can do in order to optimize their practice incomes in this era of heightened regulatory compliance. I believe it is most appropriate to begin with a look at the biggie. . . . RBRVS.

RBRVS

Without doubt, the Health Care Financing Administration's (HCFA) adoption of the Harvard Resource-Based Relative Value System received the greatest attention in this year of regulatory alphabet soup. It is important to remember that RBRVS is a 5-year transitional pro-

gram which only began in January 1992. During the next 4 1/4 years, the use of RBRVS as the basic tool of Physician Payment Reform will standardize all physician fees into one national fee schedule. Equally important is how RBRVS will gather enormous data on how physicians practice medicine, all accessed through required computereze. This movement was set in place a few years ago and has only begun its implementation during 1992.

What can physicians do to minimize the impact of RBRVS in their practice today? There are numerous actions to begin immediately if you haven't already done so.

1. Become computerized.

There are a myriad of physician billing software programs available, but physicians should purchase the computer system with the best management information and reporting functions first and foremost, and billing functions second. The non-computerized practice will not be able to successfully manage through the RBRVS era, and beyond.

2. Physicians should become coding experts and set the tone for reimbursement leadership within their practices. The new Evaluation & Management codes require physician initiation. Legitimate charge capture is now completely the physician's responsibility.

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This article was prepared at the request of the *Journal*. Those wishing to contribute articles to this Section should contact the *Journal* office.

ity. The use and understanding of CPT and ICD-9 codes can literally make or break a practice.

3. Improve overall practice efficiency and productivity. This is far more easily said than done, but simply stated, physicians must make sure their practices are running efficiently during the era of level, or decreased, revenue combined with increasing overhead. The key to practice success will be greater business office efficiency in an era of tightened practice margins. An inefficient office literally eats practice profits.

‘Unless physicians take strong actions through the political lobbying power of organized medicine . . . it won’t get any better than this. 9

4. Physicians should hire the best business office staff available, especially the insurance staff. Physicians literally “get what they pay for.” They should hire and retain only business office employees that have proved their reimbursement acumen.

5. Provide required medical record documentation. It is absolutely critical for physicians to document, in the charts, what they did. Increased regulatory scrutiny and chart audits by third party payors place physicians in jeopardy and at risk for repayments, interest, penalty fees, and even payor sanctions.

6. Bill electronically. Medicare, Medicaid, Blue Shield, and other major third party payors offer electronic media claims (EMC) processing. Billing electronically, when justified, in a practice makes a great amount of sense as it re-

duces the potential for error, improves cash flow, reduces the claim turn-around time, and enhances business office efficiency.

7. Physicians should read all bulletins and announcements from third party payors, particularly Aetna-Medicare, Medicaid, Blue Shield. For physicians who routinely treat patients from neighboring states, it is advised to get on the mailing lists of those Medicare carriers, Medicaid programs, and the Blues.

8. Control practice overhead. Physicians should examine how they spend practice revenue and wisely determine the best use of their budgets. The three largest expense items within most practices are payroll, occupancy, and supply costs. By controlling two of those three, payroll and supply expenses, physicians can favorably impact as much as one-third of their annual practice expenses.

9. Seek non-Medicare patient populations. Medicare patients should not be abandoned, rather additional commercially insured and managed care patients should be aggressively sought. Of course, most physicians realize this concept, but very few have developed the marketing strategies and implemented the activities essential to effectively access new non-Medicare populations.

10. Become an active supporter of MAG, AMA, and specialty medical organizations. It is through the collective lobbying efforts of organized medicine that success has been achieved. Last fall, the increased Conversion Factor (CF) for RBRVS, was the direct result of 100,000 letters received by HCFA during the public comment period. The letters were largely initiated by the mailing campaign of organized medicine. Also, two of the most controversial aspects of RBRVS, the elimination of EKG reimbursements and new physician

payment limitations, will most likely be reversed, or at least moderated, during 1993 in response to the political lobbying success of organized medicine.

OSHA

With all the controversy over the implementation of RBRVS, the Occupational Safety Hazard Administration surprised physicians with the announcement in the December 6, 1991, *Federal Register*, of the Final Rule on bloodborne pathogens and the requirements for physician compliance. Georgia has been targeted by OSHA for its employer inspections, and the penalties for violation are quite severe and quite arbitrary.

‘Legitimate charge capture is not completely the physician’s responsibility. The use and understanding of CPT and ICD-9 codes can literally make or break a practice. 9

OSHA requirements for employee safety from bloodborne pathogens has been fully implemented since September 4, 1992. All medical practices that come in contact with body fluids are required to have a written Exposure Control Plan (which includes work controls, engineering controls, housekeeping schedules, protective equipment, record keeping guidelines, exposure incident and follow-up documentation, appropriate signage, Hepatitis B vaccination availability) and a Training Manual (initial training must have been completed in September 1992).

The associated costs of implementing the new OSHA standards such as, the development of required documentation and manuals, additional protective equipment (gloves, gowns, masks, etc.), and disposable resuscitation devices, are rather expensive. The average practice will experience approximately \$1,500 to \$2,000 per year in OSHA associated expenses.

“Two of the most controversial aspects of RBRVS will most likely be reversed during 1993 in response to the political lobbying success of organized medicine.”

CLIA '88

The Clinical Laboratory Improvement Act of 1988 has finally been implemented. Although expected for quite some time, there has been an overriding “wait and see” attitude by physicians as to the actual implementation of CLIA. September, 1992, marked the initial implementation of CLIA. Registration certificates, or certificates of waiver, were to have been in practices in order to be conducting any laboratory tests. On September 1, Secretary Louis Sullivan of HHS announced a “grace period” extending until December, 1992, for completion of the registration phase. The fines for non-compliance are outrageous — \$10,000 per day, or per test, whichever is greater.

Initial registration fees ranging from \$100 to \$600 should have been paid already. Theoretically, inspections were to begin in September. Large commercial refer-

ence and hospital labs, already covered under regulations, will be the first to be inspected. Physician Office Laboratories (POLs) will not be inspected until 1993-94. The initial inspection is expected to be “educational.”

In order to be in compliance with CLIA, practices need: (1) Policy/procedure manuals for all laboratory testing performed; (2) Quality control schedules and documentation; (3) Patient test management systems; (4) Appropriate personnel; (5) Proficiency testing (required by January 1994).

It has been estimated that CLIA will increase the cost of each laboratory test performed from 25¢ to \$1. Not counting any additional staffing requirements, the added expense ranges between \$350 to \$2,600 per year, with the typical “moderate complexity” physician office lab realizing \$1,200 to \$1,700 in annual costs.

ADA

Effective July 26, 1992, the Americans with Disabilities Act employment rules went into effect. ADA does impact practices since physician offices are classified as “public accommodations”, and applies to *all* employers with 25 or more employees until July 26, 1994, when the number of employees reduces to 15. Even most small group practices of four or five physicians are most likely covered under the regulations since the employee threshold includes all practice employees, both full-time and part-time, plus the physicians themselves. The public accommodation rules have been in effect since January, 1992, and applies to all offices, regardless of size.

The ADA employment rules bar discrimination against the disabled with regard to job application and hiring procedures, advancement or discharge, employee compensa-

tion, job training, or anything else associated with employment. Although broad in scope, the Act does not require affirmative action relative to the disabled and does not set any quotas. To enjoy protection, a disabled applicant or employee must meet the skill, experience, education, and job-related requirements for the position.

Proper job descriptions will provide the basis of compliance.

All practices should review their employee job descriptions and determine what reasonable accommodations the practice is prepared to make.

The public accommodation Rules cover: anti-discrimination (regarding acceptance of an individual as a patient), auxiliary aids (videotapes for the deaf, interpreters, etc.), changes to facilities (the removal of physical or architectural barriers which limit access), and regulations impinging on new construction or renovations.

“Georgia has been targeted by OSHA for its employer inspections, and the penalties for violation are quite severe and quite arbitrary.”

UPIN

The Unique Physician Identification Number (UPIN) became effective January 1, 1992. Simply stated, each HCFA 1500 claim form filed with Medicare must include the referring physician's UPIN in box 17a. Medicare claims are rejected if they are received without the correct UPIN.

Presently, UPINs are only utilized by Medicare. Its purpose to HCFA will be to monitor physician refer-

ral patterns, determine medical necessity, identify utilization outliers, and ultimately, to provide virtually endless data to be utilized in measurement of clinical outcomes.

‘UPIN’s purpose to HCFA will be to monitor physician referral patterns, determine medical necessity, identify utilization outliers, and ultimately, to provide virtually endless data to be utilized in measurement of clinical outcomes.’

Physicians should double check with their business offices to make certain that the practice has a UPIN

number for each referring physician. If a number has not been assigned, a surrogate UPIN can be used as a temporary measure. The majority of physicians have received their specific UPIN in the last year.

Summary

The impact of the governmental regulatory acronyms implemented during this year will prove to be very similar to how implementation of the Prospective Payment System (PPS) via DRGs affected hospitals a decade ago. Those hospitals that realized the dimensional shift in their industry and made prudent business decisions and adjustments have not only survived their era of payment reform but have also flourished. Those hospitals which did not recognize the regulatory changes, or chose to ignore the changes, have not succeeded, many paying the ultimate price of business failure.

The impact on physicians will be quite similar. Physicians that adopt

proven, sound, business principles and accept the absolute need to be informed and pro-active, will not only succeed, but they too, will flourish. Physicians who choose otherwise, quite frankly, risk practice failure.

A few years ago, the American Hospital Association published what I believe is the ultimate statement of health care regulatory bureaucracy. The publication boasted 80 pages, containing more than 2,000 entries. Its title was *Acronyms and Initialisms in Health Care Administration*. With the addition of the regulatory acronyms implemented during 1992, the size of that publication has probably more than doubled by now.

Being able to digest this regulatory alphabet soup has its benefits; not only will physicians feel more comfortable in their knowledge of being in regulatory compliance, it may also help physicians focus on the best methods of managing their practices and ultimately, their careers.

Are Patients Predisposed to Sue Their Physicians?

Robert Bean

THE REASONS patients sue their physicians for professional liability fall into two categories. The first is the injury itself, and the second has its roots in the injury but is triggered by anger or the patient's perception of the practice of medicine. Claims are filed based on the injury itself include economic reasons. The patient has incurred an injury for which he/she will have future medical expenses or lost wages and may want to recover the loss. The patient is usually not able to afford these expenses and his/her insurance, if any, may not cover extended treatment, therapy, future procedures, or special-care needs, so there is an economic reason for recovery.

Also, patients who have incurred an injury may have a "lottery mentality." The patient hears or reads in the media about someone who has been awarded a large sum of money for an injury, and the patient feels entitled to a similar "wind-fall." Plaintiff attorneys will often take "good" cases on a contingency fee basis. With this arrangement, the attorney finances the litigation for a percentage of the award, if any. The patient has easy access to an attorney's services, invests nothing but time, and may reap an award.

Family members and friends may also persuade an otherwise satisfied patient to pursue legal action for an injury. Therefore, when pos-

sible, it is advisable, with the patient's permission, to involve the family as part of the treatment team.

Although family members or friends are often key to triggering an action for professional liability, other persons may also persuade an otherwise satisfied patient to pursue legal action. Some studies have shown that up to 7.5% of claims against physicians are triggered by other health care workers. Your colleagues, consultants, nurses, and allied health professionals sometimes make disparaging comments about the care rendered by a physician. Comments such as "Why wasn't an x-ray ordered?," "I wonder what he/she was thinking about when this medication was ordered?," "It's a good thing you came to me when you did," or "I don't think you were being treated properly," trigger claims. Comments such as these raise suspicions in the patient's mind as to the competency or perceived negligence of their primary care or referring physician.

Most often these comments are unfounded. The critical practitioner may have no knowledge of previous care provided or what the

referring physician's observations or treatment involved. Some patients have even asked, "Do you think my other doctor was negligent? Should I sue?" Do not let yourself get involved in rendering a legal opinion about previous care. This is a question for an attorney, not a doctor. Giving an opinion without the full facts may persuade the patient to initiate an unwarranted civil suit against another physician and may bring you in as an expert witness to render an opinion as to the standard of care in a case with which you are not fully familiar.

Disparaging comments are often made in the hospital or clinic record which becomes a part of the permanent record. Waging a war of words in the medical records with another practitioner or health care worker should be avoided. Your comments on entries in a medical record could trigger an even sharper response from the person being attacked and will most certainly be an indication that there may be a problem with the care provided. Also, if disagreements are not settled, a good plaintiff's attorney will encourage continuing the fight in a different venue, the courtroom, where the "divide and conquer" tactic is most effective.

Fear of being criticized by colleagues may cause a physician not to seek a much needed consult. The likelihood of being criticized

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increases when there is no communication between consulting practitioners. It is advisable to have direct communication with your consultants in order to promote understanding of previous care.

“Studies have shown that 7.5% of claims against physicians are triggered by other health care workers. Negative comments about colleagues raise suspicions in the patient’s mind as to the competency or perceived negligence of his/her physician. ”

It has been stated that 80% of civil actions filed against physicians were triggered by an emotional event. Anger at either the physician or the medical system is a primary reason patients sue their physicians. A patient’s response to a maloccurrence depends largely on the relationship he/she has with his/her physician. A physician who has established a good patient/physician relationship is much more likely to have a patient seek an explanation for an injury rather than go to an attorney to seek information.

A Georgia hospital risk manager tells a story about a surgical incident which resulted in an injury. She tried to bring the surgeon and the patient together to discuss the procedure and the reason for the maloccurrence. The patient indicated that she was not going to sit down and talk to the doctor who had “treated me like dirt after he

injured me.” Instead, the patient indicated to the risk manager that she was going to seek legal advice. Since then, the hospital has had a request for medical records from an attorney and expects legal action to be forthcoming. The surgeon lost a valuable opportunity to defuse the patient by not nurturing a positive relationship.

Another risk manager relayed a story of a surgeon who also had a surgical maloccurrence and from that point on did his best to avoid the patient. During the few brief encounters following the surgery, the surgeon did not discuss the surgical mishap with the patient and refused to discuss the injury or answer the patient’s questions. The patient felt she had no other recourse but to file a lawsuit against the physician to obtain the information. After the trial, the patient indicated that if the physician had told her in his office what she heard in court she would not have sued her doctor.

Anger has also caused patients to sue physicians when they experience unexpected outcomes. Physicians who wish to avoid lawsuits will try to make outcomes of care match the patient’s expectations. Patients who understand the risks, side effects and possible adverse outcomes of treatment or procedures are more likely to embrace or accept a bad outcome and less likely to be angered by it. Communication is the key to avoiding unexpected outcomes. By communicating potential risks and potential bad outcomes, you can dispel the patient’s unrealistic expectations of the practice of medicine.

Patients do not understand medicine or the medical complexities involved in medical care. As we know, the practice of medicine is not an exact science, injuries do occur, and patients do die in hospi-

tals. The media has promoted the miracle of modern medicine with all its technological advancements and discoveries. The media has also created unrealistic expectations through shows such as “Marcus Welby, M.D.,” in which patients were always friends and always cured. Hospitals and physicians have traditionally fostered a perception of infallibility. Patients are predisposed to expect perfection, but they need to expect realistic outcomes within medical limitations.

“Giving an opinion without the full facts may persuade the patient to initiate an unwarranted civil suit against another physician and may bring you in as an expert witness. . . . ”

A number of iatrogenic injuries never result in claims against the physician. There may be several reasons for this. The patient may not realize the injury was caused by the physician. The patient may have been forewarned about the risk of the procedure and accepted the injury as a known complication. The physician/patient relationship may be so good that the patient has sought and received a satisfactory explanation for the injury or the patient is unwilling to take legal action against a friend, the physician.

Practicing quality medicine by established standard of care is the best way to avoid an injury to the patient. Effectively utilizing the art of the practice of medicine is one of the best ways to avoid a lawsuit.

U.S. Supreme Court Reaffirms Right to Abortion While Permitting Some State Regulation

Andrea H. Fox

IN 1973, the United States Supreme Court in *Roe v. Wade* held that a woman's fundamental right to privacy included her decision whether or not to terminate her pregnancy, but recognized that the State had important interests in the protection of the woman's health and prenatal life.¹ The Court in *Roe* set up a trimester framework for analyzing State restrictions on abortion, balancing the State's legitimate interests with the woman's fundamental right. Since that time, the struggle between these sometimes competing interests has continued, with the fate of abortion regulations being decided by the Supreme Court. Most of the early State laws violating the *Roe* trimester framework were struck down.

During the Reagan-Bush era, five Supreme Court Justices were appointed. With each new appointment of a conservative Justice, States became bolder in enacting abortion restrictions, and in the last few years, many of these restrictions were upheld by the Court. This year the Court was confronted with amendments to Pennsylvania's abortion laws that regulated a woman's right to get an abortion to a greater extent than any past regulations before the Court. To abortion opponents, this case, *Planned Parenthood of Southeastern Pennsylvania v. Casey*,² represented the Court's best opportunity to overrule *Roe* and put the question of abortion in the hands of

‘While the implications of the Supreme Court’s ruling are still being debated, for now, it is clear that under Casey, the State cannot prohibit a woman from choosing to have an abortion before viability.’

State legislatures. While proponents of the right to choose hoped the Court would reaffirm *Roe* and find the Pennsylvania amendments unconstitutional, such a result did not seem likely considering the composition of the Court and the manner in which recent abortion regulations have been upheld. At the very least, both sides of the controversy hoped the Court would provide some definitive answers as to the extent a State can regulate a woman's right to have an abortion. The Court in *Casey*, however, chose a middle ground, and instead of identifying rules and providing certainty, it may have made judicial analysis of abortion issues more complicated. By a very narrow mar-

gin, the Court in *Casey* upheld a woman's basic right to have an abortion. However, the Court also recognized the State's legitimate interest in protecting the health of a woman and the life of an unborn child, as it upheld all but one of the several amendments to the Pennsylvania Abortion Control Act (the "Act").

Compromises in Casey

The Court has not provided much in the way of clear concise guidelines in its recent abortion cases. In fact, the last three abortion decisions have not resulted in a majority Court opinion, only plurality opinions.³ In *Casey* the Court offered a majority opinion, but the composition of the "majority" was continuously shifting. The Justices in *Casey* were asked to decide the constitutionality of the recent amendments to the Act requiring, among other things, that prior to receiving an abortion, a woman give her informed consent, a minor provide the consent of a parent, and a married woman notify her husband. Justices Blackmun and Stevens voted to reaffirm *Roe* and to *reject* almost all of the amendments to the Act; yet they did so for different reasons and each wrote a separate opinion. On the other side, Chief Justice Rehnquist and Justices White, Scalia, and Thomas, in two separate opinions, voted to *uphold* all of the amendments, explaining that the State, and not the

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Court, should be in the business of articulating an "abortion code." In the middle were Justices O'Connor, Souter, and Kennedy, who seemed to have negotiated a compromise in order to get a majority opinion by upholding the "essence" of *Roe*, while also upholding most of the amendments to the Act. Evidence of these compromises can be seen throughout the majority's opinion. Because of the diversity of the Justices' views on abortion and because much of the opinion was decided by a vote of 5 to 4, *Casey* does not provide strong precedent on which lower courts and state legislatures can rely.

Reaffirmation of Roe's Essential Holding

A majority of the Court⁴ voted to uphold the "essential holding" in *Roe*, which it viewed as having three parts. First, *Roe* acknowledged a woman's right to decide to have an abortion *before viability* and to obtain it without undue interference from the State. Second, *Roe* confirmed the State's power to restrict abortions *after fetal viability*, provided that the law contains exceptions for pregnancies endangering the woman's life or health. Third, *Roe* established the principle that the State has a legitimate interest from the beginning of a pregnancy in promoting the health of the woman and the life of the fetus that may become a child. This majority, however, did not uphold the finding in *Roe* that a woman's right to abortion was a "fundamental right" under the United States Constitution, and that State regulations restricting this right were subject to "strict scrutiny" in which only "compelling State interests" were upheld. Apparently, this majority, in what can be seen as a compromise position, did not consider the standard for analyzing abortion decisions to be part of *Roe's* essential holding, instead opting for a less

stringent standard (discussed below).

The majority Justices went to great lengths to explain why their view of *Roe's* essential holding should be upheld. According to this majority, a woman's right to terminate her pregnancy is a "liberty" protected against State interference by the Substantive Due Process Clause of the Fourteenth Amendment of the United States Constitution. The majority compared the constitutional protection afforded the right to choose to terminate a pregnancy with the protection given to other personal decisions relating to marriage, procreation, contraception, family relations, and child bearing. The majority found that it was these most intimate and personal choices, which they considered essential to a person's dignity and autonomy, that are protected "liberties" under the Fourteenth Amendment.

‘Currently, in Georgia, the only significant restriction on a woman's right to obtain an abortion is the requirement that a minor under 18 years of age or her physician notify one of the minor's parents of an impending abortion.’

Chief Justice Rehnquist and Justices White, Thomas, and Scalia disagreed with the comparison of liberties, explaining that unlike procreation, marriage, and contraception, abortion was the deliber-

ate termination of potential life. Furthermore, in the dissenting Justices' view, the right to have an abortion was not "implicit in the concept of ordered liberty" since during much of the 19th and 20th centuries abortions were banned in this country.

The majority Justices were also influenced by the doctrine of *Stare Decisis*. This doctrine generally requires courts to adhere to legal principles previously decided by courts in similar fact situations; as a result, at least in theory, the public has faith in, and relies upon, these decisions. Were courts not restrained by this doctrine, a change of law could result from changing views of society or merely by a change in the composition of the Supreme Court. In such an event, the judicial branch of the government would be little different from the two political branches — the executive and the legislative.

The majority Justices in *Casey* concluded that *Roe*, or at least the compromised view of *Roe's* "essential holding," must be upheld since it had not proven unworkable or obsolete; overturning *Roe* would result in serious injustice to the people who have organized their relationships and made choices in reliance upon the availability of abortion should their contraception fail. According to these Justices, "the ability of women to participate equally in the economic and social life of the nation has been facilitated by their ability to control their reproductive life." The four dissenting Justices found preposterous this notion that women had reached their "place in society" relying on *Roe* instead of as a result of "their determination to obtain higher education and compete with men in the job market." In their view, *Roe* was simply decided wrongly and should be overturned.

New Guiding Principles?

Justices O'Connor, Souter, and Kennedy, in their plurality opinion, established, in what they considered an attempt to give more substance to a woman's right to choose, "guiding principles" for analyzing abortion restrictions. In actuality, these Justices elevated the importance of the State's interest in the health of the woman and the fetus. This plurality concluded that State regulations no longer must survive strict scrutiny and be written narrowly to further "compelling State interests." Instead, these Justices decided that abortion regulations should be analyzed under a new "undue burden" standard, and if, prior to viability, a regulation had the effect of imposing an undue burden on a woman's ability to decide whether or not to terminate her pregnancy, her constitutionally protected liberty would be invaded and the regulation would be invalid.

The plurality explained that an undue burden would exist if the purpose or effect of the law was to place a *substantial obstacle* in the path of a woman seeking an abortion before the fetus is viable. The question of what constitutes "substantial obstacles" and "undue burdens" will have to be resolved by courts without the benefit of previous decisions, and such resolutions may result in a greater reliance on judges' subjective determinations. In fact, Justice Stevens, in a separate opinion in *Casey*, applied the undue burden standard to the amendments in question, but reached a different conclusion than the other Justices applying this standard.⁵ This new standard seems more complicated and may provide less guidance than the strict scrutiny standard, resembling a compromise instead of a tool for constitutional analysis.

This plurality of Justices also re-

jected *Roe's* trimester framework. To these Justices, a rigid timetable was not necessary to protect a woman's right to choose. They believed that State restrictions on abortion should be evaluated in light of their impact on the woman's right to choose, instead of when they are imposed on the woman. This plurality, however, continued to rely on viability as the point in time when the State is free to regulate abortions, provided there are exceptions for the protection of the woman's life or health.

The four dissenting Justices disagreed with the new undue burden standard, finding it even more unworkable than *Roe's* trimester analysis. These Justices proposed that the less demanding "rational basis" standard be used. Under this standard, a regulation restricting abortion would be upheld if it was rationally related to a legitimate State interest. Because there is no majority opinion on the standard to be applied in analyzing abortion restrictions, it is unclear which standard will be used in the next abortion decision. Consequently, not much substantial guidance can be discerned from *Casey*.

Analysis of the Pennsylvania Abortion Control Act

Before any of the abortion amendments to the Act became effective, five abortion clinics and a class of physicians, who provide abortion services, brought a lawsuit seeking (i) a declaration from the District Court that these amendments were unconstitutional, and (ii) an injunction against their enforceability. The District Court agreed, finding all of the amendments unconstitutional. On appeal, the Court of Appeals for the Third Circuit reversed, upholding all but one of the amendments, and the Supreme Court affirmed that decision. The following is a summary of the Court's decision on some of the

more important amendments to the Act:

A. Informed Consent. The Court examined the amendment to the Act requiring a woman to give her informed consent prior to obtaining an abortion.⁶ The amendment specified that in order for a woman's consent to be "informed," she must receive certain information from her physician and wait 24 hours before obtaining the abortion. In particular, the amendment required the physician to explain the nature of the procedure, the health risks of abortion and childbirth, and the "probable gestational age" of the unborn child. Additionally, the physician or a qualified non-physician was required to inform the woman of the availability of printed materials published by the State providing information about the fetus, medical assistance for childbirth, child support from fathers, and a list of agencies providing abortion and other services.

A majority of the Court (Chief Justice Rehnquist, and Justices O'Connor, Souter, Kennedy, White, Scalia, and Thomas) voted to uphold this informed consent statute.⁷ Justices O'Connor, Souter, and Kennedy acknowledged the State's legitimate interest in the psychological well-being of the woman and found that, as long as the information provided by this State was truthful and not misleading and was provided to insure that a woman make a thoughtful and mature decision, the amendment was not unconstitutional, even if the State expressed a preference of childbirth over abortion. In addition, this plurality of Justices found the 24-hour waiting period to be a reasonable expression of the State's legitimate interest in assuring that a woman make an informed, deliberate choice; although the waiting period could increase the cost of an abortion and result in a delay, these were not substantial obstacles, par-

ticularly since there was an exception for medical emergencies.

B. Spousal Notification. The Court next addressed the amendment to the Act requiring a woman to notify her spouse prior to obtaining an abortion except in the event of a medical emergency. The Act provided exceptions to the notification requirement if (i) her spouse was not the father of the child; (ii) her spouse could not be located; (iii) the pregnancy was the result of sexual assault by her spouse and the assault had been reported to the authorities; or (iv) she believed that by informing her spouse she would be subjected to physical harm.⁸

A different majority of the Court (Justices O'Connor, Souter, Kennedy, Blackmun, and Stevens) found that this restriction placed an undue burden on a woman's right to choose to terminate her pregnancy. This majority concluded that in most cases a woman would inform her husband of her intent to have an abortion, but that many women who suffer physical and psychological abuse from their husbands were too frightened to notify them. It was these women, this majority believed, whose rights to choose an abortion must not be diminished because of their dysfunctional relationships. While acknowledging that a husband had an interest in his wife's pregnancy and the fetus she was carrying, this majority recognized that abortion regulations had a far greater impact on the mother's liberty than the father's. Moreover, this majority found that, in general, a husband had no enforceable right to require his wife to inform him before exercising her personal choices. Such a right, this majority concluded, would be tantamount to a veto, and the State did not have an interest great enough to require women to notify their spouses before obtaining an abortion.

Chief Justice Rehnquist and Jus-

tices White, Scalia, and Thomas disagreed with the majority, concluding that the spousal notification amendment rationally furthered the State's legitimate interests in promoting the "integrity of the marital relationship" and protecting the father's interest in his unborn child. The spousal notification requirement, in these Justices' opinion, evidenced a rational attempt by the State to "improve truthful communication between spouses and encourage collective decision making."

C. Parental Consent. The Court also reviewed the parental consent amendment to the Act requiring an unemancipated woman under the age of 18 to provide her informed consent and the consent of one of her parents or her guardian prior to obtaining an abortion, except in the event of a medical emergency. Also, the amendment provided a judicial by-pass procedure whereby a court could allow an abortion (a) if the young woman is mature and has given her informed consent and cannot get the consent of a parent; or (b) if the Court determined that an abortion would be in her best interest.⁹ A majority of the Court (Chief Justice Rehnquist, Justices O'Connor, Souter, Kennedy, Scalia, White, and Thomas) upheld this amendment. The Court previously had recognized the State's "strong and legitimate interest in the welfare of its young citizens, whose immaturity, inexperience and lack of judgment may sometimes impair their ability to exercise their rights wisely."¹⁰

Implications to Georgia Physicians

A majority of the Court in *Casey* reaffirmed the woman's constitutionally protected right to choose to have an abortion, prior to viability, without unwarranted influence from the State, and permitted States to enact some regulations on the woman's right to choose. The impli-

cations of this holding are still being debated. For now, it is clear that under *Casey*, the State cannot prohibit a woman from choosing to have an abortion before viability.

It also is clear under *Casey* that the State is permitted to enact some restrictions on the woman's right to have an abortion, although it is unclear how the restrictions will be analyzed in the future. Because a majority of the Court did not agree on what standard is to be applied in evaluating the constitutionality of abortion restrictions, it is almost impossible to predict which regulations will be upheld and which will be struck down. It must be anticipated that States will become even more creative in enacting regulations, further restricting and discouraging abortions, and many of these regulations will end up in the courts.

Currently, in Georgia, the only significant restriction on a woman's right to obtain an abortion is the requirement that a minor under 18 years of age or her physician notify one of the minor's parents of the impending abortion.¹¹ Under *Casey*, this statute should be upheld, if challenged, as a reflection of the State of Georgia's legitimate interest in the welfare of its young citizens. Moreover, applying the standard proposed by Justices O'Connor, Souter, and Kennedy in *Casey*, the statute would not seem to represent an undue burden on the minor. Also, under the standard proposed by Chief Justice Rehnquist, Justices White, Thomas, and Scalia, the Georgia statute would appear to be rationally related to the State's legitimate interest.

In addition, Georgia, like many other states, utilizes the trimester framework in regulating abortions. For example, all abortions performed after the first trimester must be performed in a licensed hospital or health facility licensed by the

Georgia Department of Human Resources.¹² Whether these restrictions remain valid after *Casey* is not clear. The Court abandoned the trimester approach,¹³ but it is not apparent which standard will replace the trimester analysis. This confusion may be resolved in the Court's next abortion decision. In the meantime, Georgia physicians will have to wait and see what transpires in the November election and the upcoming legislative session.

Notes

1. *Roe v. Wade*, 410 U.S. 113 (1973).
2. _____ U.S. _____, 60 U.S.L.W. 4795 (June 29, 1992).
3. See, *Ohio v. Akron Center for Reproductive Health*, 497 U.S. 502 (1990); *Hodgson v. Minnesota*, 497 U.S. 417 (1990), *Webster v. Reproductive Health Services*, 492 U.S. 490 (1989).
4. Justices O'Connor, Souter, Kennedy, Blackmun and Stevens.
5. Justice Stevens concluded that the amendment to the Act requiring a woman to receive certain information and wait 24 hours before obtaining an abortion served no useful or legitimate purpose, and, therefore, was an undue burden.
6. 18 Pa. Cons. Stat. Ann. 3205(a) (1989).
7. The Chief Justice and Justices White, Scalia,

and Thomas would uphold the informed consent requirement because it is rationally related to the State's legitimate interest in assuring that a woman's consent to an abortion be fully informed.

8. 18 Pa. Cons. Stat. Ann. 3209(a), (b) (1989).
9. 18 Pa. Cons. Stat. Ann. 3206(a), (c) and (d) (1989).
10. *Hodgson v. Minnesota*, 497 U.S. 417, 444 (1990).
11. O.C.G.A. 15-11-112(a) (1988).
12. O.C.G.A. 16-12-141(b) (1973).
13. Justices O'Connor, Souter, and Kennedy in their plurality opinion explicitly rejected the trimester framework. Chief Justice Rehnquist, Justices White, Thomas, and Scalia, would overturn *Roe* completely, including the trimester framework.

The Hospital Medical Staff Section Twentieth Assembly Meeting December 3 - 7, 1992 Opryland Hotel Nashville, Tennessee

**Highlights of the Interim Meeting will include
an educational program on:**

Part I: A Futurist's Picture of Health Care 2000

A highly recognized consultant in health care issues will provide his perspective of the factors that will influence the reform of the health care system in the decades to come. Having painted a picture of Health Care 2000, the futurist will respond to questions of a reactor panel which will focus on:

- the role of organized medicine in framing the future health care delivery system,
- the role physicians will play in shaping the future and assuring adequate access to high quality health care services, and
- the impact that anticipated changes in the health care delivery system will have on the hospital medical staff's relationship with the community outside the hospital setting, including the payers.

Part II: Physician / Hospital Organizational Models for the Future

The relation of the hospital with members of its medical staff will be substantially impacted by the forces that are shaping national health care policy and the health care delivery system of the future. The HMSS Representatives will learn:

- what some states are doing to serve as "laboratories" for alternative health care delivery systems,
- what the AMA is doing to study and advise physicians on the appropriateness of various physician / hospital organizations, and
- what one consultant anticipates will ultimately be the prognosis for organizational relationships between health care providers.

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Hospital Medical Staff Section — Your Access to Action

Thomas E. Price, MD

DR. GWYNNE BRUNT introduced you to this new HOSPITAL MEDICAL STAFF feature in last month's issue of the Journal. He explained with great clarity many of the problems facing each of us as practicing physicians, especially in our interaction with hospital administrations and their bureaucracies. I agree that it is extremely important that for us continue to champion the cause of our patients and refer to them as our common denominator as we make decisions and recommendations regarding health care. However, so many of us feel that our opinion or our activities will make no difference in the formulation of policy or in the logistical administration of health care in our community, state, and nation. If this is your belief, please allow me to introduce you to the Hospital Medical Staff Section.

The Hospital Medical Staff Section (HMSS) is an exciting grassroots organization that can give you and your colleagues access to organized medicine at the highest level. I don't need to tell you that we are at a crossroads in the administration of health care in our nation. Regardless of the outcome of this fall's election, I believe we will see great changes in health care policy at a national level during the next administration. It is incumbent upon physicians at all levels to become intimately involved

‘With the ability to effect national policy from a grassroots level and with the rapid access to national organized medicine policy that is afforded by the HMS Section, there can be no reason not to become involved.’

in that policy making. If not, then we abrogate our duties and responsibilities and leave to non-medical individuals the task of making medical judgments that will change the way you and I practice medicine for years to come. If you believe that clerks in the federal bureaucracy are capable of making decisions that will benefit your patients and allow you to practice medicine with quality as your guide, then you need read no further. If not, however, then I have a challenge for

you: become actively involved in organized medicine and in the Hospital Medical Staff Section.

The Hospital Medical Staff Section is a national organization that was introduced and sponsored by the American Medical Association in 1982. It was the intent of the AMA to form an organization that would address itself to the concerns and needs of those practicing physicians who are members of a hospital medical staff. It was foresight at the national level that saw that the pivotal decisions to be made regarding medicine were to be at the hospital medical staff level (93% of physicians are members of a hospital medical staff). This organization has grown rapidly, and in 10 short years has become extremely important as the AMA's contact with the practicing physician and often the instigator of bold resolutions that help shape medical discussions at the national level.

The AMA-HMSS is a special section within the AMA. It convenes at the annual June and interim December meetings held immediately prior to the AMA House of Delegates and in the same location. It is at these national meetings that the business of the AMA-HMSS is conducted. At these meetings, resolutions may be introduced by an individual or by a state hospital medical staff section and thereby receive testimony and action by the House of Delegates. It is through

Dr. Price practices orthopedics and serves as Guest Editor of this HOSPITAL MEDICAL STAFF section. Those wishing to contribute articles or suggested topics for articles should contact him or the Journal office. Send reprint requests to Dr. Price at North Fulton Orthopaedic Clinic, 2500 Hospital Blvd., Suite 310, Roswell, GA 30076.

this avenue that access to national organized medicine may be had by any practicing physician who participates in the Hospital Medical Staff Section.

‘If you believe clerks in the federal bureaucracy are capable of making decisions that will benefit your patients and allow you to practice medicine with quality as your guide, then you need read no further.’

Because of this fast track to the top and direct link to the AMA, no longer can it be said that it is not possible to become actively involved at a national level without spending years attempting to climb up the ladder of representation in a state medical society or a national specialty society. We have often heard this statement in the past by many of our colleagues and the next time you hear somebody voicing this complaint, please let them know where they can constructively put their energies.

An HMSS representative must be an active member of a hospital medical staff who is duly elected to that post. He or she must also be a member of the AMA. Each hospital in the nation, of which there are approximately 6,000, has the ability to send a representative to these national meetings. They may also send an alternate delegate to further increase their participation and voice. A letter certifying an individual from the Chief of Staff or Secretary of the medical staff as an

HMSS representative is all that you need.

It is also a two-way street; significant benefits can come from the AMA. Access to information on national health care policy, its implementation and formulation, are readily available from the AMA to the HMSS representative. Education of all individuals related to the hospital medical staff is important and can be greatly assisted by a membership as an HMSS representative. Those individuals who may be interested in this information include not only physicians but also medical staff office coordinators or managers, hospital medical staff directors, and even chief executive officers.

Other educational items that can be extremely helpful to an HMSS representative in his or her particular hospital staff include assistance in the appropriateness and methods of selecting medical staff officers, the formulation and logistics of revising or adopting medical staff bylaws, assisting with credentialing of medical staff members regarding their clinical privileges (an area that will become extremely important as hospital administrations attempt to add economic credentialing to the guidelines), recommendations regarding methods for effective quality assurance and peer review and assistance in identifying potential problems with future visits by JCAHO and their accreditation process. This involvement and any change to it or expansion of scope is at the direction of the HMSS House of Delegates and therefore the practicing physician. Consequently, if the present focus or area of concerns addressed by the Hospital Medical Staff Section do not assist you or your hospital medical staff in a particular area, it is with relative ease that you, as an HMSS representative, can bring about a change in

that focus to accomplish your end.

As the landscape for the practice of medicine changes, it is only through organized medicine that we will be able to effect change that once again has as its goal the quality of medical care for our patients. Membership in the Hospital Medical Staff Section has also brought about an added benefit to me. I am heartened by the solidarity and quality of individuals that I have been associated with both at the state and national level. These are truly your colleagues who are dedicating great time and effort to advancing the cause of medicine in a positive direction.

‘Because of this fast track to the top and direct link to the AMA, no longer can it be said that it is not possible to become actively involved at the national level without spending years in a state medical society.’

We are, however, somewhat constrained by a relative lack of membership. Given that organized medicine is the only avenue by which effective change can be accomplished, I am baffled by the lack of participation of many of our colleagues. If we were able to expand our membership to just the 80 to 90% level, the bounds on our accomplishments would be endless. With a higher level of monetary support and a greater involvement of physicians and all that brings, new ideas and energy, no governmental body or agency or special interest group would be able to significantly alter our course.

I am drawn to the Hospital Medical Staff Section as the avenue for this involvement. It is possible that an individual who had not been involved to date could become an HMSS representative, sponsor a resolution, attend the interim meeting of the AMA-HMSS in Nashville, Tennessee, in December, 1992, testify and lobby for the enactment of that resolution, have that resolution acted upon by the AMA House of Delegates and, if successful, alter national medical policy within less than a 6-month period. The old line that there is just no way to get involved effectively is absolutely untrue. I challenge you once again to this involvement.

What about the HMSS at the state level? The Medical Association of Georgia endorsed the state Hospital Medical Staff Section and provided for its formulation in 1983. However, there was not great emphasis placed on participation at a state level until recently. MAG is excited about the progress of the HMSS and supports our attempts to increase participation at the state level. Topics would be discussed in a similar manner in resolutions at a meeting just prior to the MAG House of Delegates (in addition to quarterly meetings already in progress).

Other activities that are possible at a state level for the HMSS include possible legal council for medical staffs, and liaison work with the state PRO, the Georgia Hospital Association, and the National Association of Medical Staff Services Organization. The review and updating of model medical staff bylaws and rules and regulations would be an ideal area of involvement for the HMSS. One of the most important activities can be simply educating our colleagues regarding what is

occurring at a national level and what organized medicine is doing and can do for all of us.

Having the ability to converse regularly, and with familiarity, with colleagues across the nation can also have great benefit. One has often heard that whatever starts in California is headed this way. Consequently, encroachments on medical staff autonomy and the need for a self-governing policy which were first felt in California and elsewhere gives our colleagues there and in other states much to offer us.

‘MAG is excited about the progress of the HMSS and supports our attempts to increase participation at the state level. Topics would be discussed in a similar manner in resolutions at a meeting just prior to the MAG House of Delegates.’

How effective is the AMA-HMSS? At the most recent AMA-HMSS 19th Assembly in Chicago, 54 resolutions and 24 governing council reports were considered. Fifteen of the resolutions from the HMSS were forwarded to the AMA House of Delegates for consideration at the 1992 annual meeting in Chicago immediately following the HMSS meeting. Ten of those 15 resolutions were adopted, or similar resolutions were adopted in lieu of the HMSS resolution, a board of trust-

ees report was adopted in lieu of one resolution, two resolutions were referred to the board of trustees, and two were not adopted. It is clear from this that the Hospital Medical Staff Section is focusing the AMA's attention at the national level on items relevant and specifically germane to the practicing physician. Some of these topics included physician DRGs, patients' Bill of Rights, health care costs, AIDS detection, treatment, and prevention, due process in the managed care environment, access to the data bank, RBRVS, self referral, and the all important area of health care reform. Since 1982 the percentage of all resolutions passed from the AMA-HMSS forward to the AMA House of Delegates acted upon positively approaches 90%. This is without question involvement with results.

If you or your hospital do not become involved at this level, just think to whom you are leaving the decisions. With the ability to effect national policy from a grassroots level and with the rapid access to national organized medicine policy that is afforded by the Hospital Medical Staff Section, there can be no reason not to become involved. Go for it!

In future articles, we will address specific topics germane to you and the hospital medical staff. If you have any topic you would be interested in hearing more about, please let us know. If you wish more information regarding the state or national hospital staff medical section, please contact Ms. Cam Taylor at MAG 404-876-7535, 800-282-0224 or me at 404-475-2710.

Bibliography

1. Dolan B. AMA-HMSS: It's not just another acronym. Orange County Medical Association Bulletin. October 1991.
2. Mueller CF. More alphabet soup: AMA's HMSS. ACR Bulletin. May 1992.

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Alcoholics Anonymous and Addicted Health Professionals: The Georgia Experience

G. Douglas Talbott, MD

IN THE SUMMER of 1935, Alcoholics Anonymous (AA) was founded by a physician and a stockbroker. In the past 56 years, this organization has proved to be of enormous therapeutic value to alcoholics and drug addicts not only in the United States but also in countries around the world. It is the model for over 100 types of self-help groups that have evolved.

Time and experience have clearly indicated, however, that health professionals have special issues with the acceptance, experience, and practice of the program of Alcoholics Anonymous. The author has treated over 2500 addicted physicians and more than 4000 other health professionals, including the nurses, dentists, pharmacists, and therapists. The initial exposure to AA in these health professionals is often accompanied by reluctance, denial, or rejection.¹ Yet data, as well as experience, clearly demonstrate that this particular form of group therapy is highly effective in the treatment of addiction. In Georgia health professionals, denial patterns have evolved

Among health professionals, denial patterns have evolved which lead to reluctance or rejection of Alcoholics Anonymous. These patterns are examined, the dynamics explored, and a construct applied to help these individuals accept AA's program of recovery.

which lead to reluctance or rejection of AA. These have been examined, the dynamics explored, and a construct has been applied to achieve acceptance of AA by these health professionals.²

Since 1975, when the Georgia Health Professional Program was

initiated, the author has been dedicated to the therapeutic value of AA in treating these individuals. Initially and subsequently, various expressions of reluctance and rejection were encountered. These have been synthesized into a list of nine typical expressions of denial of AA:

1. "I'm a private person." "My family never aired their dirty linen in public." "I've never talked in group." See #8.

2. Fear of public disclosure: "This will ruin my career, my reputation." "What will my family think of me?" "I don't believe there is anonymity."

3. Control issues: "I don't need people telling me what to do." "My life is not out of control." "I can do it myself." "I don't want to lose control of my life."

4. "I can't relate to this group." "They are worse than me." "They are not my type." "They are sick, bad, or crazy."

5. "My work, my schedule won't permit it, I don't have time."

6. "It's a religious cult." "I don't believe in God." "I'm not into religion."

Dr. Talbott is Medical Director, Talbott-Marsh Recovery Campus. Send reprint requests to him at Georgia Alcohol and Drug Associates, 1669 Phoenix Parkway, Suite 102, Atlanta, GA 30349.

7. "I don't understand Alcoholics Anonymous." "I don't know or believe in what they say, i.e., I'm not sick or diseased."

8. "I don't talk in groups." "I only discuss things one on one."

9. "I'm hopeless." "If you really knew me then you would know this wouldn't work." "I'm too bad an addict." "I'm really crazy."

It is important to reflect upon the list in an effort to more clearly understand the dynamics of these expressions of repudiation and denial. In almost all cases, these individuals went through the 96-hour assessment program at TMRC.³ They were assessed by a five-member team comprised of an addiction medicine specialist, a psychiatrist, a diagnostic psychologist, a medical specialist, and a family therapist. Review of the author's personal interviews with a significant number of these individuals, as well as analysis of data from the 96-hour assessment by the Georgia Health Professional Management Team, reveal that there are two basic emotions that produce this initial declination of AA in many individuals. These two feelings are shame and fear.

The shame addicted health professionals experience is dramatically different from guilt. In guilt, the addicted health professional will acknowledge, "I made a mistake." In shame, he or she will declare "I am the mistake." The shame of these addicted health professionals can be further characterized as dishonor, disgrace, humiliation. A vast majority of these individuals initially see themselves as bad, dumb, weak, evil, or crazy. They don't know or understand the primary Bio-genetic Disease of Chemical Dependency, therefore they don't see themselves as sick. They regard their compulsivity and loss of control with the drugs or drug as a moral or ethical issue. This is exaggerated by our current society's views.

Initially, it is apparent that AA requires verbalizing and personally expressing one's drug history and dependence. This is too frightening. Health professionals, like others, are formed and molded by the experience of their family of origin. Our own data, as well as other investigative studies, have clearly shown that there is a very high rate of Adult Children of Addiction in health professionals. Such families have been characterized as shame-based families. Then if society's moralistic approach to addiction heaps shame on an addicted health professional, the pain of cumulative shame becomes almost unbearable to the sick health professional. It is little wonder that one of the highest suicide rates in this country is in addicted health professionals.

Concomitant with the development of overwhelming shame in these health professionals is fear, the fear of abandonment.

The Georgia Caduceus Club, which meets every Tuesday night, is comprised of recovering health professionals. The meetings are distinguished by the dominant and universal fear of aloneness and fear of abandonment. There is no more terrifying, no more panicky feeling that one sees in the health professional than that of being in a state of total aloneness.

The author's experience with the use of the anechoic chamber in the Space Program graphically demonstrated the consequences of totally isolating an individual. In some of the test pilots in the Mercury and Gemini Space Program, total isolation resulted in hysteria or psychosis when they were placed in these chambers.

Drug addiction malignantly accomplishes this personal isolation in a significant number of addicted health professionals. If, and when, they can verbalize this feeling of aloneness, it is translated into such statements as, "If you really knew

me, if you knew what I had done and what I was thinking, you would never talk to me again and you would leave me forever." This fear of abandonment is universal among friends, families, and peers. Fear of aloneness becomes so lethal with this condition that addicted physicians or other health professionals feel they will die or become insane. This is an overwhelming element in the frequent suicides of impaired health professionals.

The shame of addiction and codependency is admirably treated by Alcoholics Anonymous.⁴ Yet, intellectualization, a way of life in health professionals, is often a powerful dynamic of denial of AA. Intellectualization remains a very weak tool in dealing with these individuals' shame. One-to-one traditional psychiatric therapy has proven to be unsuccessful in most cases in treating these addicted individuals and their shame, when compared to the peer group therapy of AA. Personalization through sharing and emphasizing honesty, openness, and willingness to communicate, and participation in the AA program are the most powerful weapons against shame.

It is difficult to remain shameful about actions, thoughts, and behavior when a roomful of health professional peers have experienced the same kind of feelings. Education about the disease causing the compulsion, lack of controlled use of the drug, and its consequences, ameliorates the shame. Bonding with shameful and post-shameful peers through group discussions in AA lessens the pain. As the shame disappears, so the primary and lethal fear of abandonment disperses. Once the health professional learns to attend and practice the program, then he or she will note that the abandonment is a self false perception. The fear of aloneness, when voiced in AA meetings, will find concert with many other voices. Bonding with

AA members will occur through that primary anxiety.

In the author's experience, the dissolution of fear and shame are the product of a combination of intimacy and love as practiced in the program of Alcoholics Anonymous. The author wants to strongly emphasize that nobody can explain the absolute dynamics of the outstanding success of the Twelve Steps of AA. However, it is apparent that self-revelation resulting from working the Fourth, Fifth and Tenth Steps, with self-analysis of the character defects in the Sixth and Seventh Steps, after experiencing the very basics of the first three Steps, allows the individuals to reveal and forgive themselves. Such personal progress then promotes self-trust. Subsequent trust in others will lead to intimacy. Having partially achieved intimacy, the health professional's capacity to love will begin to return slowly.⁵

Forgiveness of others is achieved through the Eighth and Ninth Steps. The gateways of love will open in the Eleventh Step and they can then practice that love in carrying the message.

So often this intimacy and love gets falsely interpreted by confusing religion with spirituality.⁶ As the Second, Third, and Eleventh Steps so classically demonstrate, this is a spiritual, not a religious, program. So with the advent of true intimacy and real love, shame and fear of abandonment will leave. The denial and rejection of AA will attenuate and disappear and the suffering alcoholic and addict becomes ready to experience the spiritual growth program of Alcoholics Anonymous. Initially, almost all health professionals are unaware of this process of recovery.

Health professionals have been characterized by the author as having malignant denial. Having assessed or treated over 4,000 such professionals, I can attest to the fact that health professionals can be characterized as unable to reach

out for help. Years ago it was believed that alcoholics had to reach a "low bottom," spiritually, emotionally, physically, before they could begin to recover. Treatment of health professionals has demonstrated that one need not lose all in order to begin recovery. It has been shown that health professionals can recover with early intervention and early involvement with Alcoholics Anonymous, once accepting treatment.

The author has designed the following steps which have been effective in introducing *and bonding* health professionals to AA:

1. Discuss own personal experience, doubts, and journey of recovery. Be prepared for hostility, anger, intellectualization, and arguments. It is important when discussing AA to have an individual talking to the health professional who has experienced AA.

2. Present history of Alcoholics Anonymous and the growth of self-help groups.

- A. "Mrs. O'Flaherty's son" — story of terminal uniqueness. Mrs. O'Flaherty looked at the 1,000 marching men and remarked how all were out of step with her son. Terminal uniqueness has killed many health professionals.

- B. Data now show 7:1 recovery in alcoholics who experience true sobriety in AA versus other forms of treatment such as psychoanalysis.⁷

3. Explain decade of the Nineties rationale for Alcoholics Anonymous. "Life and Spiritual Growth Process" not just a defense against drinking, drugging, but a physical, emotional, social, cultural, spiritual program. Important to emphasize that AA goes way beyond just stopping drinking or using other drugs. It is a spiritual growth program for the rest of the individual's life.

4. Explain Alcoholics Anonymous Program: sponsors, kinds of meetings, choices not mandates, suggestions not instructions, Al-

Anon, Alateen. Because of intellectualization of health professionals, it is important to list the 12 reasons that AA is effective. This list persuades many "intellectual" health professionals to accept AA initially:

- A. AA is available immediately and everywhere.

- B. It is a peer example, not instructions, demands or mandates.

- C. It is a group experience.

- D. It is free.

- E. It is voluntary.

- F. It is simple for an initial experience.

- G. It is anonymous.

- H. It is non-judgmental, non-punitive.

- I. The only requirement for membership is the individual's desire to stop using alcohol or drugs.

- J. It provides fellowship, a source of peer intimacy, and love.

- K. It effectively addresses issues of shame and fear by commonality and sharing.

- L. It is a spiritual, not a religious, program.

5. Have individuals write down objections to Alcoholics Anonymous. This process will bring into focus the fallacies and weaknesses of splinter groups and anti-spiritual groups. It is important not to argue, but to explain.

6. Arrange pair discussions, initially with sponsor and patient, then with couples, later with groups such as Caduceus, I.D.A.A., etc. Pair discussions initially in a social setting are not threatening. The sick health professional is not labeled as an alcoholic or drug addict. This allows the shame and fear issues to be examined and addressed as to the therapeutic value of AA. Never, however, substitute these meetings for traditional Alcoholics Anonymous meetings.

7. Request a trial period and commitment to attend three meetings, followed by seven meetings, then 90 meetings in 90 days. So many health professionals have experienced acceptance of AA only

after attending 60 or 70 meetings, in a "90 and 90" commitment.

The validity of such a process requires a monitored 5-year follow up. Dr. Galanter et al demonstrate that some validity has been demonstrated.⁷ However, more definitive studies are needed. Current data clearly show that those health professionals who fulfill the criteria of sobriety and good recovery are predominantly those who have embraced and practiced the program of Alcoholics Anonymous.

In treating health professionals,

malignant denial makes the acceptance and practice of the AA program difficult, due in large part to the shame and fear present in these individuals. However, utilizing the introductory and recovery steps as indicated in our health professional plan for AA enables a large number of addicted professionals to accept the AA program. The advantage and rewards of such bonding in terms of recovery from the disease of addiction are now evident.

References

1. Talbott G, Gallegos K, Wilson P, et al. The Medical Association of Georgia's Impaired Physicians Program: Review of the first 1,000 physicians. *JAMA* 1987;257:2927-2930.
2. Talbott G, Angres D, Angres K. The wounded healer. Parkside Press. In press, 1992.
3. Talbott G, Wilson P, Blevins J, Pruitt D. The ninety-six hour assessment; A guide for treatment of impaired physicians. In press, 1992.
4. Vaillant GE, Milotsky ES. The natural history of male alcoholism. IV: Paths to recovery. *Arch Gen Psych* 1982;39:127-133.
5. Emrick C. Alcoholics Anonymous: Affiliation processes and effectiveness as treatment. *Alcoholism* 1987;11:416-423.
6. Ellis A, Schoenfeld E. Divine intervention and the treatment of chemical dependency. *J Substance Abuse* 1990*;459-468.
7. Galanter M, Talbott G, Gallegos K, Rubenstone E. Combined Alcoholics Anonymous and professional care for addicted physicians. *AM J Psych* 1990;147:1.

The Changing Face of Primary Hyperparathyroidism

Nancy W. Stead, MD

Introduction

HYPERPARATHYROIDISM is a disorder of calcium homeostasis associated with increased levels of parathyroid hormone. In 1903, a parathyroid adenoma was found in a patient dying of von Recklinghausen's disease of bone. In 1925, a patient with hypercalcemia, hypercalcuria, and roentgenographic changes of osteitis fibrosa cystica asso-

ciated with a fractured leg had resection of a large parathyroid tumor; symptomatology was reduced postoperatively. Subsequent studies led to recognition of the occurrence of renal calculi, peptic ulcer disease and pancreatitis in patients with hyperparathyroidism.^{1,2}

Both the introduction of multiphasic screening and the development of a sensitive parathor-

Abstract

The introduction of multiphasic screening and the development of sensitive parathormone assays have changed the demography and clinical symptomatology of patients presenting with primary hyperparathyroidism. This retrospective review includes 158 patients operated on for primary hyperparathyroidism at the Medical College of Georgia from 1973-1987.

Compared to the 46 patients managed prior to 1973, the frequency of subclinical hyperparathyroidism has increased from 46% to 64%. The median patient age has increased from 50 to 59 years. Recognition of primary hyperparathyroidism in a more geriatric population modifies indications for surgical intervention in subclinical disease. Osteoporosis, myalgias, fatigue, arthralgias, memory loss, or constipation occurred in 50% of patients. These complaints are frequent in normocalcemic elderly people. They represent disease, not normal aging. Their exacerbation by hypercalcemia should not go uncorrected if neck exploration can be tolerated by the patient.

mone assay have changed the presenting symptomatology of patients with hyperparathyroidism. In 1975, Veazey, Jelenko, and Kessler described 46 patients with primary hyperparathyroidism treated at the

dence and presentation of this disease that have occurred after the development of ionized calcium measurement and parathormone assay as well as the subclinical disease documented with bone densitometry.

Incidence and Demography

An average of 10.5 patients have been treated each year at our facil-

Medical College of Georgia Hospital and Clinics from its opening in 1956 through 1972. Forty-four percent of the patients were asymptomatic.³

The present review comprises 158 patients operated on for primary hyperparathyroidism at the Medical College of Georgia Hospital and Clinics from 1973 through 1987. In this report are described the changes in inci-

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ity since 1973. This disease remains more common in females of both races, with the female to male ratio of 5:1 and a white to black ratio of 1:3. The median age of patients in this series was 59, with 16 people at least 70 years old, two of whom were more than 80.

Symptoms

Presenting symptoms of patients in this series are shown in Table 1. The most frequent disease-related presentations were recurrent nephrolithiasis in 17%, bone pain or pathologic fracture in 10%, and psychiatric or cognitive dysfunction in 5%. The most dramatic presentations were two patients with neck masses and three patients with hypercalcemic crisis. Two patients were referred for recurrent hypercalcemia. The most common presentation was incidental hypercalcemia detected on multiphasic screening of patients followed for other acute or chronic medical disease; they formed 64% of this series.

In this series as in others, concurrent symptoms occurred frequently in patients with primary hyperparathyroidism. Forty percent has recent or distant nephrolithiasis. Thirty percent had bony abnormalities on chest or abdominal radiographs or on magnified hand films; in half the studies, the only abnormality was osteoporosis, which is not a radiographic change specific for hyperparathyroidism.

Neurologic dysfunction had multiple manifestations including constipation in 28% of patients, fatigue in 21%, cognitive or psychiatric illness in 10%, and myalgias in 7%.

Physical findings were those of

associated illness. The one patient with palpable parathyroid tissue had carcinoma. Goiters were palpable in 6% of patients.

Laboratory Features

Hypercalcemia with hypophosphatemia is the chemical hallmark of primary hyperparathyroidism. Total serum calcium and phosphorous levels were known for each patient. Although calcium averaged $11.6 \pm 1.1\text{mg\%}$, the range was 9.8-17mg%. Twelve percent of patients had calcium values less than 10.6mg%, the upper limits of the normal range. Likewise, serum phosphate averaged $2.72 \pm 0.65\text{mg\%}$. The range was 0.8-6.0mg%; 50% had values in the normal range.

Since 1982, ionized calcium levels have been available for routine clinical testing. This calcium measurement is a much more sensitive indicator of calcium homeostasis than total serum calcium is. Of 73 patients in whom it was measured, it was elevated in 99%; the patient with normal ionized calcium level was ultimately proven to be normoparathyroid with hypophosphatemic rickets secondary to antacid ingestion.

Hyperparathyroidism causes mild renal tubular acidosis. The chloride-to-phosphate ratio has been calculated on all patients. The mean value is 39.6, with a range of 18 to 121. Of seventy-eight patients with serum phosphate less than or equal to 2.6mg%, 91% had a chloride to phosphate ratio greater than 40, and all had values greater than 33. Of 76 patients with serum phosphate levels greater than 2.6mg% and serum creatinine less than

1.5mg%, 80% had a chloride phosphate ratio greater than 33, but only 13% had values greater than 40. All patients with a chloride-to-phosphate ratio of less than 33 had serum phosphate levels greater than 3.0mg%.

Radiologic Studies

Bone disease is detected by radiologic rather than by blood studies. Osteoporosis was seen on 16% chest or abdominal roentgenograms. Magnified hand films showed at least minimal periosteal elevation of the second or third phalanx in 65% of 29 patients in whom they were taken. Bone densitometry using single or dual photon equipment was performed on 123 people. It was one or more standard deviations below normal in 53% of patients studied. There was no correlation between diminished bone density and elevation of alkaline phosphatase.

Ultrasonography with a 10 megahertz probe was carried out on 34 patients in a 2-year period. In 50% of these people, a mass was detected on the side of the neck ipsilateral to the adenoma identified at operation.

Surgical Findings and Pathology

Both sides of the neck were explored in all patients in an attempt to identify four parathyroid glands. What appeared grossly to be normal parathyroid might be fat pathologically. All patients with a diagnosis of adenoma had one biopsy proven normal parathyroid; 38% had two or three. The most frequent histologic diagnosis was adenoma which occurred in 78%. Among them was an adenoma with cystic degeneration and a mediastinal adenoma identified during the patient's third exploration for hypercalcemia. Hyperplasia occurred in 18% of patients; six of these patients had only two diseased glands, and the remaining normal glands with biopsy-proven normal histology

TABLE 1— Presenting Symptoms of Hyperparathyroidism

Renal calculi	16%
Bone pain/fracture	9.4%
Neurologic dysfunction	5%
Hypercalcemic crisis	2.5%
Neck mass	1.7%
Recurrent/persistent hypercalcemia	1.7%
Incidental	64%

Table 2 — Clinical Features of Patients with Recurrent or Persistent Hypercalcemia

Pathology	Number Normal Glands Biopsy	Discharge		wks	Followup		Outcome
		Ca mg%	Caionized mg%		Ca * mg%	PTH** pg/ml	
Adenoma	1	8.9	5.05	4	5.64	2138	resolved
Adenoma	1	9.9	—	208	5.45-6.06	2608	—
Adenoma	1	8.4	5.11	4	5.33	1207	—
Adenoma	2	9.1	4.4	13	5.96	1332	—
	1 hypercellular						
Cancer vs hyperplasia	none	10.5	5.75	12	4.67	—	resolved
Cancer	—	8.6	4.55	104	12.6	—	metastases
Adenoma	none	12.4	—	12	12.2	—	2nd adenoma
Hyperplasia	RU, LI glands	10.8	—	4	12.3	—	—
	not found	11.2	—				
Hyperplasia	none	11.1	—	—	—	—	—
No gland	none	12.2	—	5	12.8	—	—

* patients a-e ionized calcium, patients f-j total calcium

** parathormone normal range (380-900 pg/ml)

were not resected. The third diagnosis was cancer which occurred in 1% of patients.

Three patients had normal parathyroids at operation. One presented with bone disease and hypophosphatemia without hypercalcemia; neither ionized calcium nor parathormone levels could be measured. The bone disease proved to be antacid-induced hypophosphatemia.

The second patient presented with renal stones and had had an ulcer in the remote past. Serum calcium values ranged from 10.7-11.8mg%, with serum phosphate levels 3.8-5.2mg%. At exploration the left inferior, right inferior, and a mediastinal gland were each removed and were each histologically normal. Post-operative hypocalcemia required vitamin D calcium gluconate therapy to maintain a serum calcium level of 7.5mg%.

A third patient was referred for exploration because of persistent hypercalcemia after resection of right upper parathyroid which was normal. Serum calcium was 12.3mg%, phosphate was 2.6mg%, and parathormone value was 87 uI Eq/ml (normal < 65 uI Eq/ml). At operation, a right thyroid lobec-

tomy revealed no parathyroid tissue. Biopsy of the left upper gland was normal. Exploration behind the larynx, in the tracheo-esophageal groove and the mediastinum to the level of the aortic arch revealed no parathyroid gland. Hypercalcemia persisted postoperatively.

Clinical Pathologic Correlations

Ten patients, or 6% of this series, had recurrent or persistent hypercalcemia after initial parathyroid exploration. Of the five patients with recurrent hypercalcemia, one had carcinoma, and four had adenomas. None of the patients with adenoma had three biopsy-proven normal parathyroid glands. Of the five patients with persistent hypercalcemia, only one had an adenoma. Three patients had hyperplasia. One patient was explored for hypercalcemia persistent after an unsuccessful exploration 1 year before; no parathyroid tissue was identified.

The degree of hypercalcemia varies greatly in patients with hyperparathyroidism. The data were analyzed for correlation between adenoma volume and total serum calcium, ionized serum calcium,

and 24-hour urine calcium. Adenoma volume was estimated as the volume of a sphere of diameter equaling one third of the sum of the adenoma diameters measured in three perpendicular planes. There was no correlation between tumor volume and any of these measures of elevated calcium.

Discussion

Symptomatic hyperparathyroidism is the same illness in the years since 1973 that it was at the Medical College of Georgia from 1956-1972. Renal stones, peptic ulcer disease, and neuromuscular dysfunctions of fatigue, depression, or myalgias remain the most frequent presenting complaints. However, the frequency of symptomatic hyperparathyroidism in the aggregate has decreased from 54% of total cases before 1973 to 37% of those presenting since 1973.

The increasing frequency of incidental hyperparathyroidism coincides with the introduction of multiphasic screening. Moreover, those patients asymptomatic from hyperparathyroidism have other illness; only 9.5% were detected during screening physical examinations. The occurrence of hyperparathyroidism in patients

with other illness contributes to the increased age of hyperparathyroid patients seen since 1973 as compared to those diagnosed earlier. The median patient age increased from 50 prior to 1973 to 59 in the present series.

This study is a retrospective one. Non-uniform review of systems would underestimate symptom frequency. Variable interviewer criteria for peptic ulcer disease, for example, could change symptom frequency up or down. Symptoms not recorded as present were tabulated as negative in this study. The population reviewed has been managed at a tertiary hospital. Clinical characteristics depend on the primary physicians' indications to refer hypercalcemic patients for tertiary care; incidental hyperparathyroidism would be under represented.

The process of establishing primary hyperparathyroidism as the etiology of hypercalcemia or a metabolic disease compatible with parathormone excess has changed since 1973. The ionized calcium is a more sensitive measure of hypercalcemia than is total serum calcium. Elevated serum levels of ionized calcium are present in all patients with primary hyperparathyroidism. Patients with metabolic bone or kidney disease which is compatible with hyperparathyroidism should be studied very carefully for etiologies other than primary hyperparathyroidism if the ionized calcium level is normal. The one patient in this series with these descriptions was proved ultimately to have antacid-induced hypophosphatemic bone disease.

The renal tubular acidosis of primary hyperparathyroidism is too mild to be a useful independent clinical discriminator among etiologies of hypercalcemia. The degree of elevation of the chloride phosphate ratio could be predicted by the degree of reduction of serum phosphate; the correlation coefficient

between the two values was 0.92.

The parathormone assay has made primary hyperparathyroidism an illness of inclusion, not exclusion, in a hypercalcemic patient. When Arnaud plotted parathormone activity against calcium levels in normal people, the correlation coefficient was -0.569. At calcium levels of 10-10.2mg%, the upper limits of normal in his laboratory, parathormone levels ranged from undetectable to the lowest quartile of the normal range.⁴

Protein electrophoresis and radiologic studies for occult systemic malignancy and sarcoid are not necessary in hypercalcemia associated with an elevated parathormone level. Patients with hypercalcemia of a non-parathormone etiology have suppressed serum levels of parathormone. In patients with primary hyperparathyroidism, the trend is for serum calcium and hormone level to have a positive correlation. Patients with hypercalcemia and parathormone levels in the upper half of the normal range are likely to have mild primary hyperparathyroidism causing altered hormone calcium homeostasis.

Between 1973-1987, parathormone levels in this series were measured by four different radioimmunoassays. The frequency of parathormone levels in the normal range varied from 40% in assay A to 4 % in assay C. All patients had pathologically proven adenomas or hyperplasia.

In this series tumor size estimated by volume did not correlate with serum levels of total or ionized calcium. This is in contrast to the data of Gaz and Wang⁵ who demonstrated increased serum calcium in patients with larger glands by weight. Calcium homeostasis is a function of gastrointestinal absorption, internal mobilization, and excretion. Calcium intake, sodium intake, fluid intake, renal function,

efficiency of 1-hydroxylation of vitamin D, calcitonin response to calcium level, and bone mineral mass all modulate the final degree of hypercalcemia which results from relative or absolute elevations of parathormone. In addition, variability in neoplastic parathyroid tissue at the cellular level affects the degree of hypercalcemia caused by tumors of comparable volume or parathormone content.

Fuleihan et al⁶ studied the effect of ambient calcium level on parathormone release from adenomatous or hyperplastic parathyroid tissue *in vitro*. In three of 10 patients, there was no suppression of hormone release at calcium concentrations up to 3.0 millimolar, whereas the remaining seven patients had 50% suppression of parathormone release at calcium concentrations averaging 1.1 millimolar.⁶

Hyperparathyroidism symptomatic with renal calculi, brown tumors, pancreatitis, or peptic ulcer disease deserves surgical intervention; the exception is the coexistence of life-threatening illness that renders symptomatic hyperparathyroidism moot. Operation of asymptomatic patients is controversial.^{7,9} The point of controversy actually is the definition of asymptomatic. Using metabolic measures including bone densitometry, hypercalcuria, and calcium balance Kaplan et al⁷ demonstrated all of six patients studied to be symptomatic from hyperparathyroidism. Using clinical criteria, Scholz and Purnell⁸ identified 142 patients asymptomatic from primary hyperparathyroidism; criteria for inclusion included serum calcium less than 11.0mg%, no roentgenographic evidence of bone disease, creatinine clearance greater than 65mm per minute, absence of active renal stone disease, and absence of chronic pancreatitis. These patients were followed for 10 years; during that time 22% ultimately underwent parathyroidectomy for increasing serum calcium, decreasing renal

function, appearance of radiographic bone disease or development of psychologic changes. Indications for surgery lie between the metabolic parameters of Kaplan et al⁷ and the clinical ones of Scholz and Purnell.⁸

In this series, bone disease occurred objectively in 50% of patients who were studied by bone densitometry. In all patients studied serially, diminished bone density either remained stable or showed progression; it never improved in a persistently hyperparathyroid patient. In patients studied after operation, the decreased bone density never progressed.

Patients with diminished bone mineralization have subclinical but symptomatic primary hyperparathyroidism; these patients need operations to prevent or retard development of osteoporosis with its associated vertebral and femoral fractures. The data from this series suggest that bone density, not plain

film, should be used to determine the presence or absence out of disease. Those deemed asymptomatic should undergo serial bone densitometry measurements. Likewise, asymptomatic patients should not have unexplained myalgias, fatigue, arthralgias, depression, memory loss, or constipation.

Expanding the definition of symptomatic hyperparathyroidism to include these symptoms, in addition to those of Scholz, acknowledges the increasing age of patients with hyperparathyroidism. Osteoporosis, myalgias, fatigue, arthralgias, memory loss, and constipation are frequent complaints in elderly people. They represent disease, not normal aging. Exacerbation by hypercalcemia should not go uncorrected if neck exploration can be tolerated by the patient.

Acknowledgements

The author appreciates helpful

discussions with Dr. Arlie Mansberger.

References

1. Boothby WM. The parathyroid glands. *Endocrinology* 1921;5:403-440.
2. Cope O. The story of hyperparathyroidism at the Massachusetts General Hospital. *New Engl J Med* 1966;274:1174-1182.
3. Veazey CR, Jelenko C, Kessler F. Primary hyperparathyroidism in a referral hospital. *Amer Surg* 1975;41:139-147.
4. Arnaud CD, Tsao HS, Litledike T. Radioimmunoassay of human parathyroid hormone in serum. *J Clin Invest* 1971;50:21-34.
5. Gaz RD, Wang C. Management of asymptomatic hyperparathyroidism. *Am J Surg* 1984;147:498-502.
6. Fuleihan GE, Chen CJ, Rivkees SA, et al. Calcium-dependent release of N-terminal fragments and intact immunoreactive parathyroid hormone by human pathological parathyroid tissue in vitro. *J Clin Endocrinol Metabol* 1989;69:860-867.
7. Kaplan RA, Snyder WH, Stewart A, Pak CYC. Metabolic effects of parathyroidectomy in asymptomatic primary hyperparathyroidism. *J Clin Endocrinol Metabol* 1976;42:415-426.
8. Scholz DA, Purnell DC. Asymptomatic primary hyperparathyroidism. *Mayo Clinic Proc* 1978;56:473-478.
9. Peskin GW, Greenburg AG, Salk RP. Expanding indications for early parathyroidectomy in the elderly female. *Am J Surg* 1978; 136:45-47.

Child Abuse by Scalding

Barry M. Renz, MD, Roger Sherman, MD

—Abstract—

Physical abuse of children by burning is a serious crime that leaves the youngest of our children with permanent physical and emotional scars. The victims tend to be less than 2 years of age.¹ Burn-abused children usually suffer from a spectrum of physical, psychologic, and nutritional neglect. Burn abuse is costly in terms of pain, suffering and health care. Up to 15% of acutely injured children seen in emergency departments, admitted or not, have been abused.² Burns were involved in up to 22% of physical abuse cases.³ Up to 26% of pediatric burn admissions were the result of abuse.⁴ The most common form of burn abuse in children requiring hospitalization is the scald. Physicians who treat children and burn patients should have a knowledge of the literature and clinical factors associated with pediatric burn abuse.

THE SUBJECT OF CHILD abuse surfaced in the literature in 1946 with Caffey's report.⁵ In 1954, Woolley⁶ described "injury-prone environments," recognized the inconsistencies of histories provided by the abused victims' parents, and first used the term "child abuse." In 1962, Kempe¹ first presented the specific syndrome we have come to know as the "Battered Child Syndrome." Kempe described a multisystem clinical condition in young children that resulted from an almost endless variety of forms of serious repeated physical and emotional abuse as well as nutritional deprivation. Both the public and health care professionals were appraised of the Battered Child Syndrome, a problem of major concern to society.

During the period when the Battered Child Syndrome was recognized, little attention was given to the fact that certain specific burn patterns in children were clearly inconsistent with the history provided by the victim's caretaker.² The first

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the Battered Child Syndrome, expanding the abusive capacity of parents to include burns.⁸

In 1970, Stone⁹ was the first to focus on burning as a form of child abuse. Deliberate burning was one of a variety of physical atrocities that tended to be repeated, progressively more severe, often ending in death. Certain burn injury patterns were described that were so typical that conclusions could be drawn

case report of burn abuse appeared in 1961 in an article reviewing childhood homicide.⁷ A 6-year-old female was scalded to death and found to have multiple, older, healed and healing contact burns of her buttocks and external genitalia, a perfect example of burn abuse. In the mid-1960s, burn abuse was recognized as an integral part of

about their abusive etiology.¹⁰ Differences between burns that resulted from accidents and those that followed deliberate injury were noted.¹¹ When burns were associated with other types of injuries such as fractures, such cases resembled Caffey's original case descriptions of infants with dissimilar injuries. Keen¹² suggested that skeletal radiographs be obtained in instances of nonaccidental burns just as Caffey had originally suggested for infants with subdural hematomas in order to search for evidence of skeletal trauma.

The diagnosis of abuse should be aggressively sought by the health care team so that proper therapy can be instituted and recurrent abuse prevented.

Injuries to children denote an accidental, neglectful, or deliberate failure of the protection of the child. Forty-nine to 82% of child abuse victims have been less than 2 years of age.^{13,14} The abusive home environment is typical and frequently involves a young, single, uneducated parent, greater than two children, or severe marital conflict.^{15,16} Up to 15% of children with acute injuries seen in an emergency department or requiring hospitalization were physically abused, the majority of articles reporting a figure of 10%.^{2,17}

The most common form of physical abuse seen in children involves soft tissue contusion.¹⁸ Nearly every abused child has a superficial soft tissue injury, the most easily recognizable physical manifestation of abuse being seen on the skin, e.g., abrasions, bruises, and small burns.¹⁸⁻²⁰ Physically abused children are reported to have up to a 100%

incidence of multiple injuries, a 28-42% incidence of cerebral injury or permanent brain damage, and a 32% incidence of skull or long bone fractures.^{1,8} Seventeen percent of abused children required hospitalization, the majority admitted to a surgical service with a mean hospital length of stay of 9.3 days.³ Reported mortalities for physically abused children range from 4.3-25%.^{14,21}

Without intervention, repeated attacks occur in 44-88% of abused children.^{18,19} Children who were returned to their original abusive environment and suffered repeated attacks had higher mortalities of 30-35%.^{22,23} The number one cause of death in infants 6 to 12 months of age was physical abuse.²⁴

The diagnosis of abuse should be aggressively sought by the health care team so that proper therapy can be instituted and recurrent abuse prevented. This may require a search for abnormal physical, psychologic, developmental, and/or ancillary findings known to be associated with burn abuse.

Burn abuse, mainly through contact with hot objects or scalding, is a serious source of pediatric trauma. Burn abuse is costly in terms of pain, disability, psychologic sequelae, and prolonged hospital times required by the courts to allow appropriate placement arrangements.^{25,26} Many cases of burn abuse are obvious at presentation. Others are subtle and might pass for accidents if one's level of suspicion is low. Differences exist between deliberate and accidental burns as well as between deliberately and accidentally burned children.

There are many historical, clinical, and social clues to the abusive nature of a burn. A thorough history is critical. The most frequently mentioned clue is a discrepancy between the history offered by the child's caretaker and the burn pattern, type, or symmetry.^{1,11,16,18,27} Explanations for the burn that are

confusing or inaccurate, delays in seeking treatment, disagreements between the child's and parent(s)'s histories, and offered injury mechanisms that are incompatible with the victim's motor development should arouse suspicion of abuse.^{1,2,8,9,18,27}

More often than not, abused children's health is below par, reflecting chronic neglect.¹ Clues derived from physical examination that a child may have been physically abused include multiple injuries or scars in various stages of healing, suggesting previous accidents or burns, poor growth, malnutrition, poor hygiene, signs of sexual abuse, developmental and language delays or deficits, and pediatric emotional and social disorders.^{1,3,9,13,15,18,28,29}

Forty-nine to 100% of burn-abused children had evidence of acute, recent, or old non-burn injuries, many severe.^{15,16} Thirty-seven to 50% had concomitant acute or recent long bone fractures.^{12,13} Burns plus old burn or non-burn injuries characterize children with inflicted burns. The usual multiplicity of injuries noted in these children suggests that burn and non-burn abuse is not a random event but a premeditated act of aggression that may lead to severe injury or death.

A thorough history is critical. The most frequently mentioned clue [indicative of abuse] is a discrepancy between the history offered by the child's caretaker and the burn pattern, type, or symmetry.

Deliberate childhood burn topography, in general, is unlike that

of an accidental burn. A child who accidentally pulls a pot of hot liquid from a stove will usually sustain a scald of the anterior head/face, anterior neck, palmar surfaces of the hands and fingers, extended arm, anterior shoulder, axilla and anterior chest.¹¹ A bathing scald, accidental or deliberate, usually involves the lower trunk, buttocks, perineum and legs. Stocking, glove-like, or mirror image extremity distributions, sparing of flexor surfaces, concomitant or isolated cigarette burns, burns located on the buttocks, perineum, external genitalia, dorsal hands, fingers and feet, and posterior head, neck, shoulders, torso and extremities are seldom accidental and should be considered abusive until proven otherwise.^{2,8,9,11,17,23,30,32}

Rosenberg³⁰ reported that the proportion of childhood burns resulting from abuse significantly increased as the number of separate burn sites increased. A careful examination of the burn may reveal a recognizable pattern from which the circumstances surrounding the burn event can be specifically reconstructed.

Two to 26% of pediatric burn admissions were the result of abuse, with most reports in the 10% range. Infants and preschoolers, because of their more demanding natures, are the most likely to be abused.

Sequelae of burn abuse may persist long after the burn wound is healed. Permanent consequences include physical markings of inflicted injuries, physical and neurologic disability, moderate to grave

emotional disorders, school-related disorders and death.^{1,13,33}

If numbers of burn admissions are plotted as a function of age a large peak occurs in children one to two years of age, the majority of which are due to scalds, both accidental and deliberate.^{34,37} The peak incidence of accidental scalds in toddlers is a direct result of their natural curiosity and it occurs during a time of rapidly increasing mobility.^{35,38} Accidental toddler scald burns result most commonly from cooking-related accidents in the kitchen, with a lesser number occurring in the bathroom from bathing accidents.³⁶ Many scalds in children less than 5 years old may result from the spilling of hot tea or coffee.³⁹ Bathing or immersion accidents accounted for 17-24% of pediatric scalds, the majority affecting 1 to 2 year olds.^{36,40} Small burns are among the most common injuries in child abuse. Burns, mostly minor cigarette, contact, or scalds, were the primary injury or were involved in up to 79% of physically abused children, with most reports in the 6-22% range.^{3,8,10} Two to 26% of pediatric burn admissions were the result of abuse, with most reports in the 10% range.^{4,16,25,35} The children most likely to be burn or scald abused are infants and preschoolers because of their demanding nature.^{41,42} Contact burns are reported to be the most common form of burn abuse in children overall.¹⁶ Scalding, primarily by tap water or immersion, is the most common type of burn abuse in children requiring hospitalization, accounting for 27-100% of such cases.^{11,15,16,31,43} Up to 14% of pediatric scalds overall and up to 45% of pediatric tap water scalds were abusive.^{44,45}

A child's buttocks may be dipped into hot tap water as punishment for failure to toilet train, enuresis, excessive crying, or any number of actions considered inappropriate by the caretaker. Ninety-five percent of such tap water

scalds occurred in the home.⁴¹ Tap water scalds resulted in higher rates of morbidity and mortality than non-tap water scalds in hospitalized patients.⁴² Such easy access to scalding water in the home by children and parents is partly due to excessively high water heater thermostat settings.

Abusive burns tend to be more severe, deeper, and larger than accidental burns. Most childhood scalds, accidental and deliberate, result in small burns less than 20% TBSA.

Water at 44 degrees C./111.2 degrees F., the lowest temperature responsible for cutaneous burning, requires 6 hours to produce a first degree burn.⁴⁶ For each degree C. above 44 degrees C. and up to 51 degrees C./123.8 degrees F., the time required to produce a burn of given depth decreased by approximately one-half. Infants and children may sustain second and third degree scald burns after exposure to water for 10 seconds at 54.4 degrees C./130 degrees F., 4 seconds at 57 degrees C./135 degrees F., 1 second at 60 degrees C./140 degrees F., and 1/2 second at 64.9 degrees C./149 degrees F. First degree scald burns, of course, will occur much more quickly.

Most authors reported the buttocks and/or perineum to be the most frequently involved body areas in abusive scalding.^{3,8,25,31} Buttock, perineal, and external genitalia burns in infants may result from contact with smoldering cigarettes, immersion in hot tap water, or by placing the child onto or against a hot metal surface. Not all scalds involving the buttocks and peri-

neum are intentional, but isolated buttock and perineal scalds were the result of abuse in 83% of such cases.¹¹ The buttock, perineum, and/or external genitalia were involved in 40-92% of burn abuse cases, 86% of deliberate immersion scalds, but only 14% of accidental burns.^{9,12,17,25,31} The buttocks were involved in 22-75% of deliberate burns, the higher percentages reflecting tap water or immersion scalds.^{11,13,25}

Immersion scalds most commonly involve a combination of buttock, perineum, external genitalia, lower abdomen and upper thighs.² Purdue²⁵ reported that simultaneous deep scalds of the buttocks, perineum, and both feet occurred in 31% of abuse cases, no accidental burn cases, and was an immersion scald pattern more common than buttock/perineum alone, which occurred in 14% of abuse cases. The scald pattern of buttock, perineum, and both feet should alert one to the possibility of abuse and may be pathognomonic of scald abuse.^{25,32}

Abusive burns tend to be more severe, deeper, and larger than accidental burns. Most childhood scalds, accidental and deliberate, result in small burns less than 20% TBSA.^{16,23,43} Mean burn sizes for hospitalized children less than 3 years old overall were 12% TBSA, 4.6-13.5% TBSA for scalds overall, and 12.7-20.2% TBSA for tap water scalds.^{38,39,41,43,47} Mean burn size in burn abused children ranged from 8.4-25% TBSA.^{3,4}

Mean hospital length of stay for burned children overall ranged from 12.7 to 28 days.^{34,44} Mean hospital length of stay for burn abused children ranged from 17.8-19 days.^{3,27} Hospitalization times for abusive burns were longer, in general, than those for accidental burns, particularly for children with smaller burns.²⁵ Discharge was reportedly delayed beyond that deemed medically necessary in 32.4% of burn abused children be-

cause of legal and placement proceedings.²⁵ Burn wound debridement, autografting, and other burn-related surgical procedures were required in 33-56% of burn abused children.^{3,17,47}

Very few articles discuss complications specifically in burn abused children. Reported complications in burned children overall include various infections in 10-27.7% of burned children less than three years of age and a 1.5-10% incidence of burn wound sepsis.^{26,35,43,48} Subsequent mortality in those patients developing burn wound sepsis was significant.^{43,48}

Reported mortalities for burn abused children ranged from 0-40%, higher, in general, than those reported for pediatric burns overall (0.4-6.2%).^{3,11,15,43,49} Many reported deaths in pediatric burn series occurred in burn abused children, most or all due to immersion scalds and generally in the very young.^{25,43,45}

Scald abuse in infants and children is associated with pre-burn malnutrition, growth retardation, multiple other injuries, and a high incidence of post-burn complications and mortality. Because of the typical abused child's poor pre-burn health, they may not be able to compensate for the major physiologic disturbances of a burn as well as an accidentally burned, otherwise healthy child. In order to prevent inflicted burns, some parents and caretakers may need formal counseling on how to cope satisfactorily with the frustrations of child care.

Summary

Child abuse by burning occurs commonly and must be diagnosed in order to prevent recurrent burn abuse and death in some. A detailed history and burn examination are critical in the evaluation of a scalded child, particularly when the burn pattern suggests deliberate infliction. Burns to the buttocks, perineum, external genitalia, feet,

and dorsal hands are highly suspect. Scalding is the most common form of burn abuse. Most victims are 2 years old or less. Depending upon the thoroughness of one's history and physical examination, most scald abused children will have old or recent non-burn injuries, some severe, in addition to their acute scald.

Scald-abused children's health is typically below par, reflecting chronic malnutrition, physical, emotional, and hygienic neglect. Most authors report that approximately 10% of pediatric burn admissions have resulted from abuse. Deliberately inflicted burns tend to be more severe, deeper, and larger than accidental burns with an associated higher mortality. Hospitalization times are frequently prolonged due to placement problems.

References

1. Kempe CH, Silverman FN, Steele BF, Droegemueller W, Silver HK. The battered-child syndrome. *JAMA* 1962;181:105-12.
2. Schanberger JE. Inflicted burns in children. *Top Emerg Med* 1981;3:85-92.
3. Caniano DA, Beaver BL, Bowles Jr. ET. Child abuse. An update on surgical management in 256 cases. *Ann Surg* 1986;203:219-24.
4. Deitch EA, Staats M. Child abuse through burning. *J Burn Care Rehabil* 1982;3:89-94.
5. Caffey J. Multiple fractures in the long bones of infants suffering from chronic subdural hematoma. *Am J Roentgenol* 1946;56:163-73.
6. Woolley Jr. PV, Evans Jr. WA. Significance of skeletal lesions in infants resembling those of traumatic origin. *JAMA* 1955;158:539-53.
7. Adelson L. Slaughter of the innocents. A study of forty-six homicides in which the victims were children. *N Engl J Med* 1961;264:1345-9.
8. Gillespie RW. The battered child syndrome: Thermal and caustic manifestations. *J Trauma* 1965;5:523-34.
9. Stone NH, Rinaldo L, Humphrey CR, Brown RH. Child abuse by burning. *Surg Clin North Am* 1970;50:1419-24.
10. Lenoski EF, Hunter KA. Specific patterns of inflicted burn injuries. *J Trauma* 1977;17:842-6.
11. Hobbs CJ. When are burns not accidental? *J Arch Dis Child* 1986;61:357-61.
12. Keen AH, Lendrum J, Wolman B. Inflicted burns and scalds in children. *Br Med J* 1975;4:268-9.
13. Smith SM, Hansen R. 134 battered children; a medical and psychological study. *Br Med J* 1974;3:666-70.
14. Ryan MG, Davis AA, Oates RK. One hundred and eighty-seven cases of child abuse and neglect. *Med J Aust* 1977;2:623-8.
15. Ayoub C, Pfeifer D. Burns as a manifestation of child abuse and neglect. *Am J Dis Child* 1979;133:910-4.
16. Showers J, Garrison KM. Burn abuse: a four-

year study. *J Trauma* 1988;28:1581-3.

17. Montrey JS, Barcia PJ. Nonaccidental burns in child abuse. *South Med J* 1985;78:1324-6.

18. O'Neill JA, Meacham WF, Griffin PP, Sawyers JL. Patterns of injury in the battered child syndrome. *J Trauma* 1973;13:332-9.

19. Lauer B, Broeck ET, Grossman M. Battered child syndrome; review of 130 patients with controls. *Pediatrics* 1974;54:67-70.

20. Ellerstein NS. The cutaneous manifestations of child abuse and neglect. *Am J Dis Child* 1979;133:906-9.

21. Solomon T. History and demography of child abuse. *Pediatrics* 1973;51:773-6.

22. McNeese MC, Hebel JR. The abused child. A clinical approach to identification and management. *Clin Symp* 1977;29:2-36.

23. Hight DW, Bakalar HR, Lloyd JR. Inflicted burns in children. Recognition and treatment. *JAMA* 1979;242:517-20.

24. Heins M. The "battered child" revisited. *JAMA* 1984;251:3295-300.

25. Purdue GF, Hunt JL, Prescott PR. Child abuse by burning -an index of suspicion. *J Trauma* 1988;28:221-4.

26. Campbell JL, LaClave LJ. Clinical depression in pediatric burn patients. *Burns* 1987;13:213-7.

27. Weimer CL, Goldfarb W, Slater H. Multidisciplinary approach to working with burn victims of child abuse. *J Burn Care Rehabil* 1988;9:79-82.

28. Ebbin AJ, Gollub MH, Stein AM, Wilson MG. Battered child syndrome at the Los Angeles County General Hospital. *Amer J Dis Child* 1969;118:660-7.

29. Hammond J, Nebel-Gould A, Brooks J. The value of speech-language assessment in the diagnosis of child abuse. *J Trauma* 1989;29:1258-60.

30. Rosenberg NM, Marino D. Frequency of suspected abuse/neglect in burn patients. *Ped Emerg Care* 1989;5:219-21.

31. Kumar P. Child abuse by thermal injury -a retrospective survey. *Burns* 1984;10:344-8.

32. Phillips ES, Pickrell E, Morse TS. Intentional burning: A severe form of child abuse. *JACEP* 1974;3:388-90.

33. Straus P, Girodet D. Three French follow-up studies in abused children. *Child Abuse Neglect* 1977;1:99-103.

34. Yiacoymettis A, Roberts M. An analysis of burns in children. *Burns* 1976;3:195-201.

35. Raine PAM, Azmy A. A review of thermal injuries in young children. *J Pediatr Surg* 1983;18:21-6.

36. Lewis PJ, Zuker RM. Childhood scald burns: An inquiry into severity. *J Burn Care Rehabil* 1982;3:95-7.

37. Renz BM, Sherman R. The Grady Memorial Hospital burn unit: A three and one-half year experience. *J Med Assoc Ga* 1991;80:279-85.

38. Herd AN, Widdowson P, Tanner NSB. Scalds in the very young: Prevention or cure? *Burns*

1986;12:246-9.

39. Lyngdorf P. Epidemiology of scalds in small children. *Burns* 1986;12:250-3.

40. Smith EI. The epidemiology of burns. The cause and control of burns in children. *Pediatrics* 1969;44:821-7.

41. Baptiste MS, Feck G. Preventing tap water burns. *AJPH* 1980;70:727-9.

42. Feldman KW, Schaller RT, Feldman JA, McMillon M. Tap water scald burns in children. *Pediatrics* 1978;62:1-7.

43. Durtschi MB, Kohler TR, Finley A, Heimbach DM. Burn injury in infants and young children. *Surg Gynecol Obstet* 1980;150:651-6.

44. Slater SJ, Slater H, Goldfarb IW. Burned children: A socioeconomic profile for focused prevention programs. *J Burn Care Rehabil* 1987;8:566-7.

45. Adams LE, Purdue GF, Hunt JL. Tap-water scald burns. Awareness is not the problem. *J Burn Care Rehabil* 1991;12:91-5.

46. Moritz AR, Henriques FC. Studies of thermal injury II. The relative importance of time and surface temperature in the causation of cutaneous burns. *Am J Path* 1947;23:695-720.

47. Katcher ML. Scald burns from hot tap water. *JAMA* 1981;246:1219-22.

48. Nelson GD, Paletta FX. Burns in children. *Surg Gynecol Obstet* 1969;128:518-22.

49. Green AR, Fairclough J, Sykes PJ. Epidemiology of burns in childhood. *Burns* 1984;10:368-71.

ADVERTISING INDEX

MANUSCRIPT INFORMATION

American Medical Association	560
AuraTech, Inc.	586
Classified Advertisement	583
CompHealth	537
Health Quip, Inc.	537
Knoll Pharmaceuticals	552A-B
Lilly, Eli & Company	538
MAG Membership	580-582
MAG Mutual Insurance Company	564
Palisades Pharmaceuticals, Inc	546
Paine Webber	536
Trupp Hoddnett Enterprises	546
U.S. Air Force	537
U.S. Army Active	545
U.S. Army Reserve	585
Walton Rehabilitation Hospital	545

MANUSCRIPTS — Articles are accepted for publication on the condition that they are contributed solely in this *Journal*. Manuscripts should be typewritten, double-spaced, and the original and one copy should be submitted. Receipt of manuscripts will be acknowledged.

STYLE — In general, articles can be 8-10 pages in length. For exceptional circumstances, contact the Managing Editor. Footnotes, bibliographies, and legends should be typed on separate sheets, double-spaced. Bibliographies should conform to the following style: name of author (with initials), title of article, name of periodical, date, volume (number, if available), and pages.

Sorter NA, Wasserman SI, Austen KF. Cold urticaria release into circulation of histamine and eosinophil chemotactic factor of anaphylaxis during cold challenge. *N Engl J Med* 1976;294:687-90.

NEWS NOTES — District and county medical societies, Association members, and readers are invited to send in any news items of general concern to members of the Medical Association of Georgia.

REPRINTS — Requests for reprints should be made directly to The Ovid Bell Press, Inc., 1201-05 Bluff Street, Fulton, Missouri 65251. Reprints must be ordered within 30 days after publication, since all type will be destroyed after that time.

ILLUSTRATIONS — **Illustrations must be submitted in duplicate.** Illustrations, tables, etc., should bear the author's name and figure number. Used photographs, drawings and cuts will be returned after publication only if requested. The cost of reproduction of illustrated material for publication in excess of three average illustrations and/or tables will be borne by the author, and the *Journal* will bill the author for this expense.

GENERAL POLICY — Authors will be given as wide a latitude as the general policy of the *Journal* and the demands on its space permit. The right to reduce, revise, or reject any material submitted for publication is always reserved. The *Journal* is not responsible for statements made by any contributor. All communications regarding editorial, advertising, subscription, and miscellaneous matters should be sent to the Managing Editor, 938 Peachtree Street, N.E., Atlanta, GA 30309-3990.

ADVERTISING — All pharmaceutical advertising must be approved by the State Medical Journal Advertising Bureau, Inc., to be acceptable for publication. Other advertising copy may be accepted subject to the approval of the Editor. All copy or negatives must reach the *Journal* office by the 25th of the month 2 months prior to publication. General and classified advertising rates will be furnished on request.

MEDICAL EDITING SERVICES — If in the opinion of the *Journal* Editorial Board, material submitted for publication could be improved by a Medical Editing Service, the Editor will contact the author for his or her approval. Association members needing assistance in preparation of material for publications may also use this service. A reasonable charge is made for this service and the cost of this will be borne by the author.

We Want to Honor You!

We're very proud of our members—some of the most active in the nation — and being active is the key to a strong and effective Association. You can help strengthen your Association by passing along the membership application on the facing page to a nonmember colleague.

MAG has established a membership recruitment award program and every member is eligible to participate. With a little effort, to be eligible for an award at the 1993 MAG House of Delegates meeting.

* Sign up 3-5 new members and receive a 25% MAG dues rebate!

* Sign up 6 new members and receive a 50% MAG dues rebate and a "Georgia Cup"!

* The top 3 recruiters will receive a "Georgia Cup".

* The county society with the highest percentage of new members will receive a "Georgia Cup".

Results are to be administered and tallied at the county level and reported to MAG by the local societies prior to February 1, 1993.

Eligibility shall include recruitment of only
(1) active members;
(2) those in first and second years of practice;
and (3) past members who have not renewed in two or more years.



The Georgia Julep Cup was designed in Macon, circa 1851, and the modified pear shape design was an early favorite. The delicate beading on Georgia pewter reflects a sophistication of taste, typical of early Georgia—the history of Georgia is in many ways the history of her craftsmen.

TEAR OUT — Give this application to a non-member colleague.

MEDICAL ASSOCIATION OF GEORGIA / COMPONENT

COUNTY MEDICAL SOCIETY APPLICATION FOR MEMBERSHIP

COUNTY MEDICAL SOCIETY APPLIED FOR: _____

I am applying also for membership in the American Medical Association: ____ Yes ____ No

NAME _____
Last First Middle Social Security No.

NAME OF EMPLOYER _____
(if other than self) Address

PREFERRED MAILING ADDRESS _____
Street City State Zip Fax No.

BUSINESS ADDRESS _____
Street City State Zip Business Telephone No.

HOME ADDRESS _____
Street City State Zip Home Telephone No.

DATE OF BIRTH _____ SEX M/F ____ NAME OF SPOUSE _____

PRIMARY SPECIALTY _____ SECONDARY SPECIALTY _____

BOARD CERTIFICATIONS: _____

GEORGIA LICENSE NO.: _____ DATE FIRST LICENSED: _____

PRACTICE STATUS: Active ____ Retired ____

PRACTICE TYPE _____ DESCRIPTION IF OTHER _____
(1) solo, (2) group, (3) hospital based,
(4) teaching/research, (o) other

GEORGIA SPECIALTY SOCIETY MEMBERSHIPS: _____

RESTRICT DISTRIBUTION OF YOUR BUSINESS ADDRESS Circle One
FROM: 1. (Medically related Profit organizations) (Y, N)
2. (Medically related Non-profit organizations) (Y, N)

MEDICAL EDUCATION _____
School Location Degree Date

RESIDENCIES _____
Date

_____ Date

_____ Date

_____ ECFMG#

(Continued on other side)

EXPECTED RESIDENCY PROGRAM COMPLETION DATE: (if resident) _____

FELLOWSHIP: _____ Date _____

HOSPITAL AFFILIATIONS: _____
(1) (2) (3)

TEACHING APPOINTMENTS: _____ Date _____

MILITARY: _____ Date _____
Branch Dates Rank
Branch Dates Rank

PREVIOUS STATE MEDICAL SOCIETY MEMBERSHIPS _____

ARE YOU A CURRENT AMA MEMBER? _____ YES _____ NO LAST YEAR PAID: _____

Within the last 5 years, have you been convicted of a felony crime? () Yes () No If yes, please provide full information.

Within the last 5 years, has your license to practice medicine in any jurisdiction been limited, suspended or revoked?
() Yes () No If yes, please explain.

Within the last 5 years, have you been the subject of any disciplinary action by any medical society or hospital staff?
() Yes () No If yes, please explain.

If elected to membership, I agree to conduct myself professionally and personally according to the principles of medical ethics and to be governed by the Constitution and Bylaws of the county society, the Medical Association of Georgia and the American Medical Association.

I hereby release, and hold harmless from any liability or loss, the _____
Medical Society, and the Medical Association of Georgia, their officers, agents, employees, and members, for acts performed in good faith and without malice in connection with evaluating my application and my credentials and qualifications, and hereby release from any liability any and all individuals and organizations, who, in good faith and without malice, provide information to the above named organizations, or to their authorized representatives, concerning my professional competence, ethical conduct, character and other qualifications for membership.

County Sponsor's Signature*

Applicant's Signature

County Sponsor's Signature*

FOR COUNTY USE ONLY

APPLICATION APPROVED BY: _____

CERTIFIED BY: _____ DATE OF ACTION: _____

*If you have any questions regarding sponsors, please contact your county society.

PHYSICIAN WANTED

PROJECT MANAGER FOR CHILDREN HEALTH SERVICES SECTION

— The State of Georgia Maternal and Child Health Branch is seeking a board certified or board eligible pediatrician. The position includes the performance of medically competent review of treatment protocols utilized in all health programs. A special project of this position will be the coordination and implementation of the federally mandated PL99-457 within the multiple programs within the Maternal and Child Health Branch. The combined public health programs that impact upon the health of children—Child Health, SIDS, EPSDT, Genetics, Early Intervention for High Risk Children, Child Safety and Accident Prevention — will require the services of a medical director. Please send curriculum vitae to Rolando Thorne, Acting Chief, Children Health Services Section, 2600 Skyland Dr., NE Lower Level, Atlanta 30319.

INTERNISTS AND FAMILY PRACTITIONERS

— The Southeast Permanente Medical Group of Georgia (TSPMG), a physician-owned and managed multi-specialty group, provides health care services to the members of the Kaiser Foundation Health Plan. TSPMG is seeking part-time and full-time internists and family practitioners to work both daytime and evening/weekend flexible schedules. No in-patient hospital responsibilities. Competitive salary. Call or send C.V. to: Linda McIntyre, Director of Professional Recruitment and Retention, The Southeast Permanente Medical Group, 3355

Lenox Rd, NE, Atlanta 30326. 800-877-0409 or 404-365-4278. Fax 404-233-04585. EOE/AA.

Family Practitioner Needed — SE Georgia. Family Practice/Urgent Care Center opening Sept. 1992, guarantee \$100,000 per year — malpractice paid. Send C.V. to: Emergency Department Physicians Medical Group, Inc., P.O. Box 9639, Marina Del Rey, CA 90295 or Fax to: 310-398-6729.

PHYSICIAN WANTED — Growing medical group seeking a highly motivated and energetic healthcare professional to manage and develop a recruitment division. Excellent communication skills and the ability to interface with physicians and hospital executives are prerequisites. This person must have 5+ years experience in management and/or marketing in the healthcare field. Advanced degree preferred.

Responsibilities include management of recruitment program and marketing recruitment services. Competitive compensation with excellent benefit package. Please send resume, salary history, and/or recent photo to: 938 Peachtree St., Atlanta 30309. Attn: Journal Box 892.

Radiology Position No Call! No Hassles!! We seek a **Radiologist** to work 8-5 Monday-Friday serving two community hospitals in southern Georgia 2½ hours from Atlanta. These hospitals work in cooperation with a 450-bed regional referral center and its outreach clinics. Extremely low overhead, no

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DeKalb Professional Building — Prime Medical Space near the DeKalb Medical Center. 600-1,170 square ft., full service, newly remodeled, ample build-out allowance. Call CORIM, Inc., 953-3434.

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Intensive Care

*Don't give me strength or wisdom
Which would be wasted on this learned physician
Dealing now in vague parameters
 of little understood nuances
 of life functions.*

*Give me instead tenacity and timorousness,
 (after the temerity of surgery)
Give me the willingness to watch,
The patience to persevere
 and to observe without interference
To try to balance the small items
To keep the potential for recovery present.*

*For after that one major attempt,
The all-out operative intervention
In which all conceivable technical problems
 and complications have been anticipated,
After which, when the last stitch is placed,
It can be said with confidence
No more can be done.*

*The ultimate insult has been applied,
 the supreme attempt has been made.
The issue no longer lies in
 manipulation of viscera or vessels
But in the capacity of this total mass
 of autonomous cells,
Holding together in mutual need and synergism,
Helped, perhaps, by the attempt
 to provide an optimal environment,
Striving to meet the need.*

*And once the need is met,
 it shall be fulfilled.*

Nursing Care

*Despite the care
 and the time
 and effort
The rain seems to seed the garden
With full grown weeds,
That flout themselves between the rows.
And mingled with the half-rotted
 squash in too wet soil,
Ignoring vigorous therapy
 and careful amputation,
The tomato plants continue to atrophy
 and pale.
Small knobby fruit grows no more
As fetal undeveloped cucumbers
Lie attached to dead umbilical cords
 of vines
Drying in the sun.
Come now Grim Reaper of Gardens
You've meddled enough with
 things more certain.*

Poems by John P. Wilson, MD, general surgeon,
Atlanta.



Thomas J. Anderson, Jr., MD

You and Your Chamber

IT IS TIME physicians realize that they are part of the business community.

Charles Erwin Wilson was once President of General Motors, and Charles Edward Wilson was President of General Electric. They were known as Engine Charlie and Electric Charlie. Engine Charlie, who was made U.S. Secretary of Defense by President Eisenhower, once remarked, "What's good for General Motors is good for America." He was severely criticized for this statement, but I have always agreed with him.

What is good for the community is also good for physicians.

In 1964, I wrote a letter to Edward Smith, who was then President of the Atlanta Chamber of Commerce. I told him that as far as I could determine, no physician had been on the Board of Directors of the Atlanta Chamber of Commerce. I asked that if I could persuade 200 physicians to join the Chamber, I would like to be appointed to their Board of Directors. More than 200 physicians were recruited, and I was appointed. It was tremendously exciting to work with the Forward Atlanta Program, to obtain new jobs for Atlanta and be part of our city's growth.

I see no reason why this experience cannot be repeated now on a state-wide basis. It will increase jobs throughout the state and obtain new jobs for each of our own localities. I would strongly urge you to become active members of your own local Chambers of Commerce and to join the Georgia State Chapter. It will benefit your community, your state, and you.

Thomas J. Anderson Jr.

Give to Your Medical School Through AMA-ERF!

(American Medical Association - Education and Research Foundation)

WHY?

1. EVERY PENNY CONTRIBUTED GOES TO THE FUND YOU DESIGNATE.
2. IT SHOWS THAT THE MEDICAL COMMUNITY IS COMMITTED TO QUALITY HEALTH AND MEDICAL CARE FOR FUTURE GENERATIONS.
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THE AUXILIARY



Growing Healthy — A Team Effort

IT IS CERTAINLY possible for one individual to make a difference. However, teamwork is more efficient, more productive and definitely more enjoyable.

The Auxiliary can give you the perfect example of teamwork at its very best — the MAG/A-MAG “Growing Healthy” pilot project in Waycross. MAG provided the seed money for the school health curriculum, and one very determined auxiliary president persuaded her auxiliary, the medical society, the county health department, the school system, and some of her friends to work together to implement “Growing Healthy” in the local

public schools. Since materials can be shared between schools, three schools were selected — 18 classrooms in all.

One of the unique aspects of the “Growing Healthy” curriculum is the excellent training the teachers receive before school begins. This training was found to be shorter in duration; therefore less costly if volunteers assist the trainers in preparing classroom displays. Auxiliary members and friends gladly gave their time for such a worthwhile endeavor.

As President of A-MAG, I was in-

vited to participate as a volunteer in the teacher training. Being a member of this unique team was quite an experience. It was wonderful to see auxiliary members working together to help improve their schools. Medical society members contributed their expertise in demonstrating anatomy dissections. It was definitely a team effort. Wouldn't it be great to have this kind of teamwork and efficiency in all our medical societies and auxiliaries?

*Carol Ann Hardcastle
President, A-MAG*

OUR PATIENTS COME OUT SWINGING.



For adults and children undergoing rehabilitation from stroke, chronic pain or head, spinal or orthopedic injuries, the simplest pleasures yield the greatest rewards. Being out in the world—feeling the sun, breathing fresh air and spending time with loved ones—takes on a new and profound importance.

At Walton Rehabilitation Hospital, we dedicate all our resources to rehabilitative medicine that allows people with physical disabilities to enjoy and participate in life to the fullest extent possible. For us, “quality of life” is much more than a catch-phrase. It's a guiding principle.

To arrange a visit or to learn more about Walton Rehabilitation Hospital's programs, ask your physician or call today.



WALTON REHABILITATION HOSPITAL

*Sponsored by St. Joseph Center for Life Inc.
& University Health Services Inc.*

“Hang Yourself, Brave Crillon...”

We fought at Arques,
and You were not there!”

*Henry IV on greeting the tardy Crillon
after a great battle victory had been gained.*

MAG

LEADERSHIP CONFERENCE

February 26-27, 1993 • Ritz Carlton/Buckhead • Atlanta, Georgia



Of Thankfulness

Charles R. Underwood, MD

Once upon a time, long, long ago, there were some people who had such incredibly advanced technology they were able to build time machines and transporter booths in which they could move freely through space. Eventually, they were able to bilocate themselves — to copy themselves in time and space. After they got the technology working, they had quite a thrill — for the first few seconds. Then a deep boredom set in because they were no longer surprised by anything. They had been everywhere. They had seen the future.

So they decided to play another game. They said to themselves: "We're going to forget our technology, and we're going to plunk ourselves down in caves and live the primitive life. Then we will grow old and have children who relearn the technology." In fact, before the second game, they had already seen this scenario with the help of their technology, but they decided that in order to have genuine experiences, they would have to exist in a state that allowed for an element of surprise.

Then we descended. And now we're on our way back to remembering.

This myth expresses the fundamental stagnation of omniscience, which, in many traditions, has been described as the reason why the universe came into being. Life is based on limitation and compro-

mise. The fact that we forget the meaning of life is the meaning of life. Being in a state of partial awareness allows experience and life to progress. God, as an omniscient being, is not an "experiencing being" because his or her experience is not new.

If You were going to start a universe, what would Your options be! You could choose to remain totally stagnant, but that wouldn't amount to a true universe. You'd need entities that experience it, entities that are fragile and temporary and not omniscient. That's who we are and why we're here.

Jaron Lanier, scientist, visionary and entrepreneur, is one of the pioneers of virtual reality, a computer-simulated three-dimensional world.

— From *More Reflections on the Meaning of Life*, David Friend and the Editors of *Life*

* * *

There's a bare hint of fall around my house this week. A bit of coolness to the early morning air and a subtle change in the green of the leaves. Our sassafras has but a single splotchy red leaf among the others and yet there it is saying in a soft and quiet way that Summer-time is easing herself into yet another winter of rest. It all reminds one that change, the ever present companion of our days, is yet alive.

It is proper that such change comes now to ease the tug on our

static selves for so also it is that this *Journal* comes more firmly to grips with the mandate that even a medical journal must conduct itself in conformity with a changing environment. Over the past few months we here at the *Journal* have heard the helpful voices of those who would point us to new directions and challenge us to different and more pragmatic goals. We shall then publish here in the next few months information — articles — which deal in a more specific manner with that aspect of our medical lives somewhat away from "patient care" and yet representing mandates in the lives of today's physicians. Such matters as the efficient organizing and conducting of our offices where so much of "patient care" is conducted — the finances of the environment in which we will practice in the years ahead — the "family side" of the physician's life so often in the past neglected — the "rules and regulations," the strictures, with which we must of necessity deal. These concerns we shall explore and yet retain our tradition of years past in publishing scientific articles and information of interest to the practicing physician. We here at your *Journal* would hope that you find these changes refreshing.

Enough, however, of the mundane affairs with which these reflections must deal. It is once again November and Thanksgiving. Here in a world beset with ethnic vio-

lence, financial disarray, and all to often the distancing of ourselves from friends, I find it necessary to step aside long enough to remind myself of the happy and satisfying part of our lives. Take time simply to be "Thankful."

I am Thankful for the technology of medicine for it has led to and confirmed many an elusive diagnosis and yet must constantly remind myself that unrestrained reliance on the machinery of medicine has also ushered me down many an erroneous and fruitless pathway. I must always remember the admonition of Paul Beeson, our Professor of Medicine at Emory, who pointed out so often that we must not forget the ultimate "test" of standing quietly at the patient's bedside and listening to them tell of their illness.

I am Thankful for this country with all of its "rules and regulations," with all of its barnacles and frustrations, for I doubt not a minute it is the most hopeful place upon this whirling sphere to pass one's life.

I am Thankful for Ross Perot. He brought to a presidential campaign fraught with all too much "diddly poo" (see *J.M.A.G.* September, 1992), with too much concern for titillating sex and too little concern for where such leads, a confirmation of my long held conviction that we are often governed by buffoons and lectured to by novices. I shall not vote for him, but he has brought humor to the humorless.

I am Thankful for Melvin Foster, my North Georgia mountain patient, who one day as his life ebbed away responded to my query as to how he was doing told me, "Just tryin' to keep my spirits up, Doc. You know, if you don't keep your spirits up you might be doing pretty

good but you wouldn't know about it." He died soon after those morning rounds. The days when my own life seems in shambles, I am thankful that Melvin Foster came my way.

I am Thankful for Eva Patterson for she taught me how to handle adversity when one day as I tried to console her over the loss of her colon because of the cancer, she winked and smiled and told me not to worry, "All you done was make me a semi-colon!," she said. Eva received a "semi-colon" from me and gave back an exclamation point.

I am Thankful for nurses for so many reasons. They are a major part of all that each of us have been and of what we have accomplished. I am Thankful they finally discarded those funny little caps which in days past identified their institutions of training but which, though proud symbols of accomplishment, seemed yet as hats to provide such poor protection from inclement weather.

I am Thankful for the Ladies at the front of my office for they create the first impression upon which my subsequent medical care either thrives or perishes. Should I be able to sing, I would say in song to them the words of the now popular ballad, "You are the wind beneath my wings."

I am Thankful for those many people, my "patients," who through the years kept my own hopes and self-respect at a functional and sustainable level. As for all of us, they placed me on a pedestal and though I well knew better that a "God" I was not, the mere insinuation was accepted with whatever degree of humility I could master and provided a sense of worth unavailable from any other source.

I am Thankful for baseball and

the Atlanta Braves for they have made children of us all again. They have taken us back to those care-free days when we were all giants and no challenge was beyond our reach.

I am Thankful for my adversaries — for our adversaries in and out of "organized medicine" — for they have caused us to look more closely at ourselves and in so doing come to an evermore accurate and defensible evaluation of our own opinions, beliefs, and values system. Beyond this, they have taught us that in the cauldron of debate and decision making, there resides a level, a conduct, which identifies us as reasonable and ethical individuals or not, the consequences of which follow and shape and control our future encounters.

I am Thankful for my financial "consultant and advisor," close friend that he is and shall remain for he told me to "buy" just as the market plunged over the precipice and "to sell" at the inception of a blast off. I am thankful that his advice taught me the value of the law of "averages" — that Medicare and the Social Security System shall yet sustain me and mine — and that the two of us remain friends in spite of all of this.

For all of this, and more, I find myself this November, this season of Thanksgiving "thankful." Surely we face problems. Certain it is that disagreements and conflict lie before us. Yet I find myself at this time of year going back to my youth, to my childhood, and reflecting upon a simple little song we sang, not unlike so many of those things we characterize as "simple." It went this way —

"Count your many Blessings
Count them One-by-One."

CALENDAR

NOVEMBER 1992

20-22 — *Atlanta: Scientific Assembly. Ritz-Carlton Buckhead.* Category 1 credit. Contact Medical Association of Georgia. PH: 800-282-0224 or 404-876-7535.

23-27 — *Sarasota, FL — Hyatt Hotel: A Practical Approach to the Evaluation and Differential Dx. of Common Neurological Complaints* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce. PH: 813-388-1766.

28 — *Athens: Football Saturday Seminars.* Category 1 credit. Contact Div. of CME, Medical School of Medicine, College of Georgia, Augusta, GA 30912-1400. PH: 800-221-6437 or 706-721-3967.

30-Dec. 4 — *Sarasota, FL — Hyatt Hotel: Update and Review of Sexually Transmitted Diseases* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc., PH: 813-388-1766.

DECEMBER 1992

4 — *Smyrna — Ridgeview Conference Center: Depression: Advances in Recognition and Treatment.* Category 1 credit. Sponsored by the Georgia Psychological Association, Mental Health Association of Georgia and Ridgeview Institute. Contact Beth A. Gault. PH: 404-434-4568, x3006, or 800-345-9775.

7-11 — *Sarasota, FL — Hyatt Hotel: Update and Review of Pediatrics for Practitioners and Emergency Medicine* (8:00 -Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc., PH: 813-388-1766.

7-9 — *Atlanta: Nuclear Medicine Update.* Ritz-Carlton, Buckhead, Contact CME, Emory University School of Medicine, 1440 Clifton Rd., NE, 30322. PH: 404-727-5695.

21-24 — *Sarasota, FL — Hyatt Hotel: Clinical Endocrinology and Metabolic Disease: A Comprehensive Review* (9:00 a.m.-1:00 p.m.) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc., PH: 813-388-1766.

28-31 — *Sarasota, FL — Hyatt Hotel: Update in Infectious Diseases* (8:00 a.m. -1:00 p.m.) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

28-31 — *Sarasota, FL — Hyatt Hotel: Advanced EKG Interpretation and Arrhythmia Management* (8:00 a.m.-1:00 p.m.) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc., PH: 813-388-1766.

JANUARY 1993

18-22 — *Sarasota, FL — Hyatt Hotel: Risk Management: "Preventive Medicine for the Practitioner"* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc., PH: 813-388-1766.

25-29 — *Sarasota, FL — Hyatt Hotel: Issues in Family Practice Medicine* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

29-31 — *Buena Vista Palace, Walt Disney World Resort, Orlando, FL: Twelfth Annual Perspectives on New Diagnostic and Therapeutics Techniques in Clinical Cardiology.* Category 1 credit 12.5. Contact Registration Secretary, Extramural Programs Dept., American College of Cardiology, 9111 Old Georgetown Rd., Bethesda, MD 20814-1699. PH: 800-257-4739 (outside the U.S. and Canada), 301-897-2695, FAX 301-897-9745.

FEBRUARY 1993

1-5 — *Sarasota, FL — Hyatt Hotel: Orthopaedics for the Practitioner and EM* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

8-12 — *Sarasota, FL — Hyatt Hotel: Geriatric Issues in Primary Care* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

15-19 — *Sarasota, FL — Hyatt Hotel: Selected Topics in Contemporary Medicine* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc., PH: 813-388-1766.

22-26 — *Sarasota, FL — Hyatt Hotel: A Practical Approach to the Evaluation and Differential Dx. of Common Neurological Complaints* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

Favoritism, the "Atlanta Bias," and Why Pick on Me?

Dan Burge, MD

THIS NOTICE is written in an attempt to allay concerns which are recurrently expressed in letters and telephone calls directed to GMCF.

The first of these is the fear of favoritism or its opposite. Our reviewers are instructed to accept no chart for review if the case involves a physician who is a personal friend or one with whom the reviewer is in economic competition. It is our policy to assign charts to reviewers who live in a different though similar practice setting, and are in active practice in the same specialty. No reviewing is done by the Medical Director of Associate Medical Directors. Their function is to see that all cases are afforded "due process," that is, that GMCF policy and the regulations set forth in our contracts are applied evenhandedly.

Occasionally, we hear the complaint that GMCF is an Atlanta-based, Atlanta-staffed, Atlanta-oriented organization whose understanding and sympathies do not extend to include the rest of our State. Please consider these facts: the GMCF Board of Directors includes two members from each congres-

sional district; our Medical Director lives in Newnan, and had practiced surgery there; our 600 reviewers are in practice all over the state — many smaller cities are far more heavily represented among our reviewers in relation to physician population that is the metro Atlanta area; of MAG members in the Atlanta area, 4.4% are GMCF reviewers; of those members *outside* the Atlanta area, 5.3% are reviewers; we have 124 Atlanta reviewers and 403 non-Atlanta reviewers.

Our Quality Intervention and Medical Review Committees are recruited from among our reviewers who live within a 2-hour drive of GMCF headquarters. (These committees serve for a single occasion only.) Typically, there are as many or more members from outside Atlanta as from within it.

Not infrequently, replies from physicians to our request for additional information concerning potential quality of care issues, con-

tain the questions: "Why are you harassing me?," or "Who are my accusers?," or "Why did you choose this record for review?." The vast majority of our records are obtained randomly. The case numbers are provided to us by HCFA. A *much* smaller group of records is chosen for review in response to a complaint from the beneficiary, his or her family, or from some outside source. Such complaints may come to us directly, or may be referred from the Inspector General's Office, from HCFA or some other authority body. In such instances, our correspondence with the physician or hospital (if a hospital issue), will *indicate* that the inquiry is based on a complaint. Some reviews are triggered by certain DRGs, and others by readmissions within 30 days of discharge or transfers from one facility to another.

GMCF has no "hit list" or quotas — GMCF has no interest in punitive action. GMCF shares your interest in high quality medical care in Georgia and helps provide it through *peer* review.

If you have questions or complaints about any of this, a Medical Director here will gladly talk with you at 404-982-0411.

Dr. Burge is Associate Medical Director, Georgia Medical Care Foundation, 57 Executive Park South, Suite 200, Atlanta, GA 30329.

Long Term Care Insurance: A Vital Component to Estate Preservation

Clifford K. Klingbell, Stephan C. Barton

IF YOU NEGLECT to evaluate your potential long term care needs you could be leaving huge gaps in your estate and retirement plans. Long term care is fast becoming the single largest unfunded liability in a middle to upper-income class family's lifetime.

Strong statements? Perhaps, but true. According to the Health Insurance Association of America, only two million people have individual or group long term care insurance. The U.S. Census Bureau estimates there will be more than 50 million Americans age 65 and over by the year 2020.

Add in the trends that Americans are living longer, that persons over age 65 will comprise an increasingly greater share of the nation's population over the next three decades, and that, according to *The New England Journal of Medicine*, nearly half of all elderly Americans will require nursing home care at least once in their lifetime. Many others will require home custodial care. How will this enormous populace afford long term care? And if the statistics and the need are so compelling, why don't more professionals and physicians make long term care planning a major part of their estate and retirement plans?

A major factor is lack of awareness. Long term care insurance is not medical insurance, but an extension of disability insurance. Most physicians take great pains to insure themselves and their prac-

‘Without fully exploring long term care needs, you run the risk of leaving huge gaps in your retirement and estate plans. Without long term care insurance, your assets can pour through these gaps. . . .’

tice against loss of income during their working lives. It seems shortsighted not to ensure that their assets don't evaporate during retirement.

For most professionals, government entitlement programs aren't the answer. As you know, Medicare is health insurance; it takes care of medical expenses only. Medicaid does cover long term care, though at a big cost. Unfortunately, many financial planners advise their clients to spend down their assets — to voluntarily spend their way into poverty — to qualify for Medicaid. The government then determines where and what type of care will be provided. Medical professionals

who work a lifetime to accumulate assets are not voluntarily going to give up their flexibility and freedom of choice.

As Medicaid trusts and other perceived loopholes become more prevalent, and considering the federal deficit and the government's dire need for increased revenue, don't expect these spending down techniques to last forever. Rules change. Half of the nation's Medicaid budget is consumed by persons who spend down to qualify, a disproportionate amount considering the program is intended to help the most disadvantaged regardless of age.

A federally funded solution is not likely to help the more affluent with their long term care needs either. The proportion of American workers to retirees is dropping dramatically, from 40 to 1 in 1935 to 3.4 to 1 in 1989, according to the book, *Agewaves*, by Dr. Ken Dychtwald. That ratio will shrink further in 2020 to just 1.8 to 1. Conversely, the number of children in the U.S., traditional caretakers in the past, has declined as a share of the general population over the past decade. Only 1 out of 3 U.S. households contains a child. Who's going to pay for long term care? The answer is, middle to upper-middle class Americans, those with an estate value, excluding homes, of \$100,000 to \$2 million. Using savings or insurance meant to accomplish other purposes — retirement

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funds, disability income during working years, living benefits from a life insurance policy — meets one need while creating another. Only long term care insurance truly meets this need.

Still, some initial products, inferior in performance and design, gave the long term care insurance industry a bad reputation in its early years. In fact, a whole generation of products has been introduced over the past three years by reputable and responsive carriers. True, their features are as numerous as the number of insurers offering them, but a flexible individual long term care product should meet almost anyone's needs. And a good provider will make these features easily understood to consumers.

The Company Behind the Policy

Of course, these features won't be worth a dime if the company behind the product isn't financially sound with a demonstrated history of performance. Just like disability and life insurance coverage, you're buying an intangible, a promise of future delivery, for an event that may occur 10, 20, or even 30 years down the road. You want to be assured that the company behind the policy will be there when it's needed.

Ideally, that company will also have disability insurance expertise. Long term care can be described as a long-tail disability — and for good reason. Long term care's benefits are usually received during retirement, but their trigger should be based on disability: loss of activities of daily living, such as bathing, dressing or feeding; or cognitive loss due to organic disease such as Alzheimer's or Parkinson's. How a company handles its disability claims — preferably looking for ways to pay claims rather than denying them — is a good barometer

of how long term care claims will be treated.

When you select the right insurer, you should find most of the following:

Flexible Payment of Benefits

Gone are the days when the market was dominated by policies that mandated nursing home stays or prior hospitalization for policyowners to receive benefits.

Today's individual long term care insurance should offer home care, though most companies still decide what expense is qualified and what isn't. A few products now offer preset monthly benefits payment directly to the policyowner, payable over one year, three years or even a lifetime. The advantage here is that you decide where the insurance can be best put to use for your care.

‘Long term care is fast becoming the single largest unfunded liability in a middle to upper-income class family's lifetime. 9

Inflation Protection

Most newer policies offer this feature as an option, which gives consumers the choice of protection from future escalating costs.

Non Forfeiture Options

A major objection to older long term care products used to be, "What happens to the money I put into the policy if I decide to cancel?" A good non forfeiture, or paid-up provision, will give policyowners equity or, if the customer lets the policy lapse after five or more years, a reduced benefit.

Elimination Periods

New policies offer a wide choice

of elimination periods, or waiting periods, just like your disability policy. Look for one that also contains features such as a once-in-a-lifetime elimination period, and one in which premiums are waived after the elimination period is satisfied and benefits begin.

Care Management

Long term care plans should also come from carriers that can offer referral to appropriate providers, advice and counseling. Only when carriers forge an ongoing relationship with their policyowners can they offer the fullest benefits.

The most frequent objection is price. Long term care insurance is not inexpensive. But the younger you buy a policy, the cheaper it is — premiums rise dramatically for buyers 70 and older. Sticker shock can be allayed by remembering the comparative cost of a year's stay in a nursing home — from \$30,000 to as high as \$100,000.

Even though professionals 65 and over may seem to be the most likely buyers for long term care insurance, those 35 to 60 years old should carefully consider long term care in their financial plans. They're at the point in their lives when they can best afford to pre-fund long term care insurance. Inexpensive long term care riders that can be attached to disability policies, in which a policyowner can lock into insurability at a later age, also can satisfy their financial planning needs now and in the future.

Without fully exploring long term care needs, you run the risk of leaving huge gaps in your retirement and estate plans. Without long term care insurance, your assets can pour through these gaps at a time when your life savings are needed the most. Include long term care insurance in the total planning process; without it there can't be total protection of your assets.

Rethinking Credentialing: Preventing Economic Credentialing, Data Bank Problems, and Other Troubles

Elizabeth A. Snelson, JD

THE MEDICAL STAFF credentialing process has long been recognized by medical staffs and hospitals as a complicated, thankless but absolutely crucial task. As if that were not enough, the credentialing process is increasingly the source of costly and divisive litigation. More devastating is the trend toward using the credentialing process to cast out physicians whose hospitalized patients don't have a positive effect on the hospital's bottom line.

Medical staffs can limit the potential for conflict and causes of legal action by screening their current credentialing processes for the following problems.

Economic Credentialing

The problem of economic credentialing is increasing across the country.¹ Generally defined as "the use of economic criteria which do not apply to quality to determine a physician's qualifications for the granting or renewal of medical staff membership or privileges,"² economic credentialing usually occurs in a variety of insidious ways.

The most common economic credentialing practice, and among the most dangerous, is the use of medical staff development plans. Often, medical staff development plans are designed to circumvent the medical staff bylaws and credentialing processes by setting up economic criteria in the guise of future development, which, if not

‘Medical staffs can limit the potential for conflict and causes of legal action by screening their current credentialing processes for the problems discussed in this article.’

satisfied, can render a medical staff member "ineligible" to receive an application to renew privileges. For example, medical staff development plans can conclude that the hospital needs to vary its patient mix to ultimately phase out treatment of diseases which cost more than the contracted-for reimbursement level. Physicians whose patients happen to contract such inefficient diseases may find that their practice is not consistent with the plan of development, and that they therefore do not qualify to receive a medical staff application. No application has been denied, the theory goes, therefore, no hearing on a denial need be granted. Medical

staff development plans warrant careful review by medical staffs, and their legal counsel.

A modality similar to medical staff development plans is that of the pre-application. In my experience representing medical staffs, I have yet to see a pre-application that is not designed to circumvent physician's hearing rights. Generally, pre-applications call for information regarding the physician's practice in order to screen out certain physicians before they can even qualify for an application. Some pre-application forms are more obvious than others, but many request information regarding the number of patients the physician plans to admit or the percentage of the physician's practice which he or she will "commit" to the hospital. If the undisclosed quota is not met, the physician does not qualify to receive an application and, as with development plans, does not have access to medical staff hearing rights. Often, pre-application decisions are not made by clinicians at all, but rather are decided by the administration.

Physician profiling is an exercise that occurs at virtually every hospital in the United States, whereby data on the non-clinical aspects of the physician's practice in the hospital is collected and used to categorize or profile a physician. Often, this data crunching is done in the billing and collections department, with an eye to determining whether

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This paper was originally presented at a seminar sponsored by MAG, "Medical-Legal Issues Affecting Medical Staffs and the Practicing Physician," July, 1992, at Amelia Island, Florida.

a physician is profitable or non-profitable for the hospital. Blending physician profiling data into the credentialing process to determine whether a physician may or may not be granted membership or privileges can constitute economic credentialing.

“The most common economic credentialing practice, and among the most dangerous, is the use of medical staff development plans.”

These and other economic credentialing schemes may threaten individual physicians as they consider their own practices and hospital privileges. Economic credentialing also threatens the legal protections usually available to physicians performing peer review. Should physicians allow economic considerations to weigh into their credentialing decisions, the peer review protections established in state and federal law may not apply. For example, the federal Health Care Quality Improvement Act (HCQIA)³ immunity applies to peer review activity decisions based on patient care considerations. The fact that a physician is or is not profitable does not affect the quality of care that the physician provides his or her patients. Thus, physicians who are involved in a decision denying or limiting a practitioner's privileges or membership based on economic considerations may find themselves without the legal protections usually afforded good faith peer review.

These are only a few of the credentialing crises that may be avoided by careful review of medical staff bylaws and policies and procedures. Medical staff docu-

ments, if drafted to protect the interests of the medical staff and its members, can effectively shield physicians who are simply trying to do their professional duty to promote the quality of care.

National Practitioner Data Bank

The National Practitioner Data Bank, is, as most practitioners already have or soon will have the opportunity to experience, a regulatory nightmare. Its requirements are convoluted, its exceptions and loopholes several and inconsistent, and its ramifications for an individual practitioner's professional life deadly.

Reporting entities struggling to comply with the Data Bank's mandates also have a difficult road. Many medical staffs have left this responsibility entirely up to the hospital, which must report adverse actions taken through the peer review process or lose protections that may also leave physicians providing peer review services exposed. Thus, medical staff members stand to be harmed by Data Bank not only as individual physicians, but also as peer reviewers. The medical staff can, by its bylaws, policies, and protocols, mitigate the effects of the Data Bank simply by addressing certain questions before issues are at hand. For example, the Data Bank regulations do not clearly state whether the hospital should report to the Data Bank the withdrawal of an application before the application is acted upon. Granted, an attorney well-versed in the Data Bank operations, regulations, and governing statute can eventually reach that conclusion. But the medical staff may save legal costs by simply stating directly in its bylaws or policy that a withdrawal of an application before the board has acted to accept or reject it will not be reported to the Data Bank.

As another example of the ambiguity involved, the Data Bank regulations require that a hospital report any resignation by a physician or dentist who is under investigation for issues of professional competence or conduct affecting patient care. However, the Data Bank fails to define "investigation." Would the fact that a physician's charts are under review constitute investigation? What if the physician is a surgeon, in which specialty all cases are to be reviewed? Should any resigning surgeon be reported? Is a physician who is impaired, and working with a medical staff physician aid committee, under investigation, necessitating the report of any privileges he or she resigns during the course of treatment? The medical staff can resolve these questions in advance by coming to a well-crafted definition of investigation, designed to generate only those Data Bank reports absolutely required. These are only a few samples of Data Bank potholes that can be repaired through certain medical staff bylaws or policy provisions.

“The medical staff can, by its bylaws, policies, and protocols, mitigate the effects of the Data Bank simply by addressing certain questions before issues are at hand.”

On the receiving end of the credentialing process, medical staffs must recognize that many Data Bank reports are the product of understandable confusion on the part of reporting entities. Uneven standards and little direction instruct reporting entities as to the relevant clinical data to divulge.

Data Bank reports on medical staff applicants must be carefully screened in the credentialing process to deduce the kernel of truth which may or may not be available from the Data Bank. Medical staffs can make order out of reporting chaos either by stipulating that Data Bank reports are not to be the sole basis of a credentialing decision, or by carefully building in to credentialing policies the specific considerations that should be given when an adverse Data Bank report is received on an applicant or reapplicant.

The medical staff should include a variety of other Data Bank provisions in bylaws or policies outside the scope of the credentialing process and hence, outside the scope of this article. Overall, the significance of the Data Bank on the medical staff is not to be underestimated.

Interdepartmental Inconsistencies

Departmentalized medical staffs are laying a foundation for litigation over credentialing mishaps if different departments are permitted to have conflicting standards for the grant or denial of clinical privileges. Long an issue for family physicians, whose privileges may cross departmental lines, the matter of inconsistent criteria for clinical privileges is arising more frequently as traditionally "cognitive" specialties are practicing invasive medicine. Medical staffs should ascertain that the standards to be applied across departments, such as numbers of cases needed to qualify and number of cases to be procured, are consistent across special-

ties, or that differentials are justified clinically. Further, medical staffs should exercise extreme caution before mandating that a privilege in a certain area is available only to those board certified in a certain specialty, when physicians boarded in other specialties may be equally trained and clinically competent. Medical staff bylaws, departmental rules and regulations, and clinical privileges lists may each harbor variances and should be reviewed for inconsistencies.

‘The matter of inconsistent criteria for clinical privileges is arising more frequently as traditionally “cognitive” specialties are practicing invasive medicine. 9

To empower the medical staff to resolve inconsistencies among interdepartmental privileges, the medical staff bylaws should provide for either conflict resolution among departments or mandate that the medical executive committee resolve any inconsistencies. Documents should be checked on a regular basis, and executive committee meetings should include careful review of departmental actions to ensure that the opportunities for conflict are squelched.

Temporary Privileges Pending Medical Staff Membership

It is the rare medical staff that

does not allow an applicant to be granted temporary privileges during the time it takes to verify credentials, complete committee and department review, and obtain executive committee and hospital board action on the application itself. It is also the rare medical staff that does not open itself up for problems in its bylaws provisions and rules affecting temporary privileges.

The HCQIA extends to peer reviewers conditional immunity from antitrust and other legal actions if the peer review is conducted in good faith, and if the subject of peer review is given notice and a fair hearing. Hearing requirements and good faith standards are described in the HCQIA and should be followed in all peer review matters. However, most medical staffs carve out temporary privileges, by specifically stating that decisions affecting temporary privileges do not give rise to fair hearing rights, or by failing to include temporary privileges actions in the grounds for hearings. The HCQIA, however, does not make an exception for temporary as opposed to full privileges. Medical staffs may disqualify themselves for a very useful immunity by failing to grant hearing rights when temporary privileges are denied, suspended, or revoked.

References

1. Editorial. Stamp out Economic Credentialing. AMN News, June 15, 1992.
2. California Medical Association Policy.
3. 42 U.S.C. 11101, et. seq.; also, see Snelson, E. Quality Assurance Implications of Federal Peer Review Laws: The Health Care Quality Improvement Act and the National Practitioner Data Bank. Quality Assurance and Utilization Review, 1992; 1: 2-11.

Reporting Confirmed Positive HIV Tests: An Update

Philip M. Rees

IN A RECENT Legal Page article ("Controlling the Spread of AIDS Confidential Information," June, 1992), I noted that health care providers and health care facilities ordering HIV tests have an obligation to report each confirmed positive HIV test to the Georgia Department of Human Resources (DHR), along with the age, sex, race, and county of having the confirmed positive HIV test. At that time, such a report was not to include any other identifying characteristics regarding the HIV infected person. However, I also explained that DHR had the authority to establish by regulation

a date on and after which "non-anonymous" reporting of confirmed positive HIV tests would be required. DHR has now established such a regulation.

On and after January 1, 1993, each health care provider, health care facility, medical laboratory, or any other person or legal entity which orders an HIV test for another person or legal entity

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which orders an HIV test for another person must report to DHR the name and address of any person thereby determined to be infected with HIV. The Georgia code only considers such cases to be "confirmed" (and thereby reportable) if at least two separate *types* of HIV tests *both* indicate the presence of HIV in the substance being tested. Such reports shall be deemed confidential and shall not be subject to public inspection. No report shall be made regarding any such test provided at any anonymous HIV testing site operated by or on behalf of DHR.

Guidelines for the Physician-Patient Relationship

Cynthia Haney

MANY INQUIRES encountered by MAG's legal counsel derive from a misunderstanding of the legal and ethical obligations pertinent to the physician-patient relationship. While the following information does not cover every circumstance, it does address some of the basic tenets regarding this issue.

A physician-patient relationship usually begins when the patient seeks assistance from a physician and the physician responds by evaluating and treating that patient. As a general rule, once a physician-patient relationship has been created, the physician is under an obligation to provide appropriate care until he or she properly withdraws from that patient's care. There exist several exceptions to this general rule, as well as commonly accepted procedures for terminating the relationship. The overarching ethical principle guiding physician decisions in these issues is that of preserving a patient's continuity of quality care.

When does a physician have an obligation to treat?

Ordinarily, a physician is under no general duty to treat a person requiring medical attention unless that physician has agreed to do so. But once a physician *does* accept a patient for treatment, a physician-patient relationship is established which contractually binds the physician to certain responsibilities.

‘A discussion of some of the basic tenets regarding the legal and ethical obligations pertinent to the physician-patient relationship.’

This obligation may arise *expressly* or *impliedly*. An express agreement to render care is commonly marked by the physician's agreement with the individual patient or some person or group representing that patient (e.g., a group health plan, a professional athletic team).

How does an implied physician-patient relationship arise?

Even though there may be no express agreement between the patient and the physician, the physician may still be under a duty to provide care if he or she (or, in some circumstances, even the physician's office staff) has interacted with the patient, thereby creating a reliance on the patient's part that should have been foreseeable by the physician. Examples of this would be where the physician or staff offers the patient medical advice or writes a prescription. A rela-

tionship might, in some limited cases, even arise if the office staff gives the patient an appointment. The key here is the patient's foreseeable reliance that ends up being detrimental to that patient.

What are some situations that may establish a physician-patient relationship?

1. Ongoing/chronic treatment requiring follow-up visits creates such a relationship and should be distinguished from the patient with a variety of periodic complaints who expects the same physician to continue seeing him or her for each separate course of treatment.

2. The mere making of an appointment is usually not enough to establish the physician-patient relationship, but some exceptions to this general rule may obligate the physician, particularly if the patient arrives for the scheduled appointment needing immediate medical attention.

3. A physician-patient relationship can be established by the physician or his or her employee over the telephone, if the subject of conversation is treatment (includes refilling prescriptions). Mere referrals to other physicians, with no attempt at evaluation of the patient's condition, does not initiate the physician-patient relationship.

4. In the case of consultations, the request by the attending physician for the consultant physician to review the patient's case is usually

Ms. Haney is MAG's Associate General Counsel. Send reprint requests to her at 938 Peachtree St., Atlanta, GA 30309.

not enough to begin the physician-patient relationship unless the consulting physician accepts and acts upon the request. A problem would be created if the consulting physician then unreasonably delays seeing the patient or evaluating the data available, resulting in the patient's injury. Once the consulting physician becomes a participant in the case by receiving and evaluating information, provides an opinion — and maybe even seeing the patient — then a physician-patient relationship is generally initiated. Note, however, that informal communication between colleagues about their patients normally does not create a physician-patient relationship; only when the consulting physician is asked to and agrees to participate in the patient's care does the relationship start.

5. IMEs (independent medical exams) occur when a physician is asked to provide a physical examination of a patient referred by a third party. Examples are workers' compensation referrals, insurance carriers examining applicants, and litigants who want the opposing party examined by an independent physician to help establish damages in tort/personal injury cases. Usually, this kind of contact between a physician and a patient does not create a physician-patient relationship, because the purpose of the examination is to establish or corroborate a condition or illness, rather than to treat the patient. Whatever evaluation results from the examination is reported back to a third party, rather than the patient, for the sole purpose of guiding that third party as to action it might take in regard to the individual examined. Once a physician begins to treat that patient or directly advise the patient about his or her medical condition, though, a physician-patient relationship is probably triggered.

6. The relationship between a

hospital and an individual physician may trigger the creation of a physician-patient relationship. A physician with staff privileges must comport with the requirements set out in that facility's bylaws or rules. For example, a physician may be required to provide "coverage" pursuant to his or her staff privileges agreement as set out in the bylaws or rules. Emergency room physicians are in a different category because (1) they generally contract as an employee of the hospital to provide care for people presenting themselves to the emergency room with a valid "emergency," and (2) federal "anti-dumping" laws may create duties to treat or stabilize a patient that formerly did not exist.

Does it matter if the physician doesn't expect or accept compensation for such treatment? (The Good Samaritan law)

Despite a lack of actual or expected compensation, the physician who has expressly agreed to treat a patient has no lesser duty than if he or she had charged the patient. In Georgia, state law specifically protects from later charges of negligence *anyone*, including physicians, who renders good faith emergency care at the scene of an accident or emergency without charging or expecting to charge for rendering such service.¹

The occurrence of an "emergency" does *not* invoke a physician's immunity, however, if it was the physician's independent or pre-existing duty to respond to the emergency. The statute's immunity clearly is also *not* applicable for a physician who provides care expecting to be paid, and whose patient later fails to pay his or her bill.²

Georgia law also provides *limited* immunity to physicians who voluntarily and without expectation or receipt of compensation, render health care services *for and at the*

request of a hospital, a public school, a nonprofit organization, or an agency of the state or one of its political subdivisions. The immunity does *not* extend to situations where a patient is injured by gross negligence or willful or wanton misconduct.³ In the 1992 Session of the Georgia General Assembly, the Medical Association of Georgia attempted unsuccessfully to expand this immunity to all situations in which physicians offer such voluntary free care, not just those in which the request for care arose from one of the above listed entities. We will attempt a similar expansion in the 1993 Legislative Session, which begins in January.

When is the physician-patient relationship terminated

There are several ways a physician's responsibility to a patient may be terminated. Generally, once the physician begins a course of treatment with a patient, the relationship can only end if the patient's condition no longer warrants treatment, if the physician and the patient mutually agree to discontinue treatment by that physician, if the physician unilaterally terminates the relationship (following the proper procedures), or if the patient discharges the physician. The physician may terminate the relationship, withdrawing from treatment of the patient, if and only if the patient is given appropriate notice of the physician's intent to withdraw and has the opportunity to secure an adequate replacement to continue treatment. The patient's continuity of appropriate care is paramount.

What is the proper way to terminate the patient-physician relationship?

A physician has a right to withdraw from the care of any patient as long as the correct procedures are followed. Failure to follow the

procedures may make a physician liable for abandonment if the patient suffers a consequent injury.

The first step is for the physician to determine if the patient is in an emergency condition. If the physician withdraws from such a patient without first delivering necessary care or stabilizing the patient and providing for subsequent care by another physician, he or she may well be abandoning that patient.

If the patient is not in an emergency condition, the physician must notify the patient of his or her intent to withdraw as of a definite date, that date being set far enough in the future to allow the patient to seek a replacement physician. Adequate time must be allowed to take into account the availability of a replacement; less time would be reasonable in an urban environment than in a rural setting, for example. Two weeks is generally considered reasonable in an urban setting. The physician may, although is not required to, include a list of potential substitute physicians locally available. It is also prudent to offer the patient a transfer of his or her medical records to the new physician, upon the patient's signed authorization.

The notification must include a provision that the physician will continue to treat the patient for any emergency condition which might arise before the withdrawal date. The notification should always be in writing and the physician should have some documentation of the patient's receipt, whether by receipt requested certified mail or by a signed receipt acknowledgment upon hand delivery. Keep copies in the patient's records.

What conduct on the part of the physician may constitute pa-

tient abandonment?

Abandonment, in and of itself, is not sufficient grounds for a lawsuit unless the patient suffered some harm as a result. The courts, however, don't need much to establish "harm." Therefore, it is prudent to be wary of common situations in which abandonment may be alleged:

1. A patient's failure or refusal to pay a bill is a frequent cause for a physician's withdrawal from the case. This is appropriate *as long as the procedures noted above are followed*. If the patient requires emergency treatment during the time window from when he or she receives notification of the physician's intent to withdraw and the actual withdrawal date, the physician is ethically required to treat the patient and deal with billing later.

2. A patient's failure to keep follow-up appointments or to follow medical advice cannot be controlled easily by the treating physician. A physician has the duty to educate the patient as to the general nature of the patient's illness or condition and why receiving medical attention is important. The physician also has the responsibility of being reasonably available for the patient to see him or her. It is advised that some follow-up documentation (usually by letter) is maintained. This done, the physician cannot drag the patient in for treatment; the patient will not be considered abandoned if he or she fails to seek continued treatment. The patient has, de facto, discharged the physician from his or her case.

3. A physician may want to procure a substitute physician in a variety of situations: the physician is ill or will be unavailable due to travel

or other commitments. The substitute physician may be temporary, as in the case of "on call" rotation, or permanent, as in the case of retirement.

In cases of temporary substitution, the physician's responsibility is to provide for competent coverage in his or her absence. The original physician should leave adequate information with his or her substitute to ensure continuity of appropriate care. It is not required that the original physician notify or obtain permission from the patient before procuring a substitute, however, it is not a bad idea to do so. If the patient objects to the substitution, it may be appropriate to offer that patient the option of terminating the relationship altogether (following, of course, the procedures outlined above) so that he or she may find a new physician.

4. Other examples are more self-evident, including a physician's failure to attend to a current patient despite necessity or a promise to do so.

Conclusion

Organized medicine regularly struggles to preserve the physician-patient relationship from intrusions by legislative and regulatory bodies. We must continue to be sensitive to our obligations, as well as our rights, within this relationship. The overarching ethical principle guiding physician decisions in these issues should always be that of preserving a patient's continuity of care.

Notes

1. Official Code of Georgia Annotated 51-1-29
2. O.C.G.A. 51-1-29
3. O.C.G.A. 51-1-29.1

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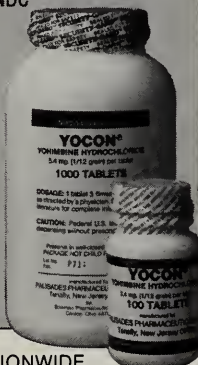
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

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References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Time Management: What It Is, How It's Done

Richard C. Haines, Jr.

60 MINUTES. That is as much time as you have in an hour to practice medicine! How much of every hour do you actually spend delivering medical care? That may sound like an odd question to a doctor who works many hours a day, has a long lead time in the appointment book, and drags home tired at night. Nevertheless, there are many ways in which a physician can lose time during the practice day ... and thereby decrease the number of patients he or she can effectively see (and unnecessarily tire him or her out).

Two issues need to be addressed. One concerns ways in which doctors lose time, and the other is ways in which doctors can get more medical practice time out of every hour. Some of the ways that doctors lose precious minutes every hour include:

1. Escorting Patients — The doctor goes to the reception room and calls the patient back, or escorts the patient to check-out when the exam is over.

2. Sitting and Waiting — Physicians while away their time in the hall because no patient is ready to be seen.

3. Scheduling Patients — The doctor takes the patient to the scheduler after the exam, takes the appointment book, and schedules the patient (both special procedures and return appointments).

4. Phone Calls — The doctor allows continual interruptions by

“The time management techniques discussed here are designed to help you optimize your practice style, to give you greater control and satisfaction over how you spend your time.”

telephone calls. When it is a referring doctor, that is acceptable. When it is not, and does not directly relate to patient management, it is time lost.

5. Progress Notes — The physician hand writes the progress note. Usually, not always, this takes more time than dictating or using a scribe.

6. Nurse Hunting — The doctor hunts for the nurse between exams. This is done so the doctor can issue a verbal order to the nurse (such as “Get a chest x-ray on this patient.”) or to find out which exam room is the next.

7. Delegating to Staff — The doctor does things which can be done

as well by staff (and in many other practices are done by staff). This has been observed to include:

a. Getting a preliminary history on a patient

b. Screening or refracting ophthalmic patients

c. Removing or applying casts.

8. Scheduling Staff — The doctor delegates a specialized function which takes time (such as scheduling surgery or getting a visual field) to staff responsible for routine patient flow. This makes the staff unavailable to properly keep the doctor's patient flow moving.

9. The Doctor's Work Area — The doctor does not have a good, effective practice area to work in. This includes:

a. The doctor does not have a consistent work environment. One minute he or she is working out of 2 exam rooms, and then 3 the next.

b. The doctor does not have enough exam rooms, causing him or her to wait in the hall for the next patient to be ready.

c. The arrangement of the doctor's exam rooms is ineffective. For instance, if a particular doctor's exam rooms are far apart, he or she will spend unnecessary time (and effort!) walking the halls. If the doctor has to walk past already-seen patients (such as at the check-out counter) in going from one exam to the other, he or she can be delayed by patient chit-chat.

d. The doctor does not have his or her own telephone. When the

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This article was prepared at the request of the *Journal*. Others wishing to contribute papers to this Section should contact the Journal office.

doctor receives an important call, "The Great Phone Hunt" begins to find a free phone, and hopefully some privacy.

Do you see yourself in some of these examples? When you are working in the "trenches," it is hard to objectively determine when you are being effective and when you are not. Generally, the causes of such lost time can be assigned to one of four categories:

1. Personal Practice Habit
2. Staff Delegation
3. Facility Design
4. System Issues.

How can you get a handle on what you may be inadvertently doing which is causing you to lose time? Time-Motion Studies.

Time-Motion Studies

With time-motion studies, your particular style is carefully observed, in detail. The elapsed time for each task you perform (i.e., looking for your nurse, taking a temperature, listening to a chest) is noted. Then each elapsed time is allocated to one of three categories: Doctor-Required, Staff-Delegated, and Time-Wasted.

Doctor-Required time represents functions which you must do. This is the reason the patient came to you in the first place. Staff-Delegated time is from functions which you are currently doing, but could be (and often are by your colleagues in other practices) delegated to staff. Many doctors work hard at making their staff efficient, at the expense of their own efficiency. (This can rob the practice of significant revenue in the interest of holding down overhead.) Time-Wasted represents time lost to an inefficient facility or office system problems.

When you know the actual amount of time you spend every hour practicing medicine (this has been observed to be as high as 59

minutes per hour, and as low as 17 minutes per hour), you can get a clear idea of your patient-per-hour potential. It will also reveal to you how much additional work you are going to start delegating to staff (perhaps requiring more staff).

So what are the steps to an effective and efficient use of your time? It has been observed that doctors who have highly organized practice systems, who spend the great majority of their practice time performing doctor-related functions with patients, have high patient volumes (compared to their compatriots in their own specialty), enjoy medicine more, and go home less tired. There are some steps which can be taken which will help you manage your time better, and be more effective.

1. Determine your current patient per hour rate (the number of patients you now see in a half-day divided by the amount of time spent seeing them) and potential patient per hour rate (from your time-motion study).

2. Make sure you have a sufficient number of exam rooms. As a rule-of-thumb, you should have 1/2 your potential patient per hour rate. Make sure they are all grouped together, and away from other patient functions in the office (such as the Business Office). You should always have a patient waiting to be seen. If you come out of an exam room and have to wait, then you either do not have enough exams, enough staff, or poor systems.

3. Provide yourself with a Doctor's Dictation Station. This is a place for you to go between exams (not your office where you may have a patient waiting) where you can sip your coffee, check the PDR, take a phone call, or dictate a progress note. And if you are hand-writing your progress note, consider dictating it or using a scribe to take it down.

4. If you use your private office for patient consultation, then it needs to be located very close to your exam rooms. If you do not talk to patients there, it is better out of the way.

5. Try to see the patient just one time during each office visit. This means allowing your staff to get the patient as ready as possible before you enter the room. If you know you are going to want an EKG on a particular patient at the next office visit, order it in your progress note. That way the staff can get the work done before you see the patient. When you enter the exam room, you not only have the patient ready, but their EKG strip as well.

6. Do not look for the nurse between each patient. If he or she is busy with patients you will end up waiting for him or her. To effect the interface between your needs and the nurses' availability, rely on light signal communications. These generally are utilized in two contexts:

a. Staff Signalling: When you want the nurse to follow-up with your current patient, check it off on an order slip and hit the nurses' light signal button (this then turns on a light on a panel in every room where the nurse might be working). Put the chart and order slip in the chart rack by the door and go see your next patient. The nurse knows he or she has a follow-up responsibility when he or she is done with their current patient. When they get done, they go to the chart rack by the first patient's exam room, get the order slip and the patient.

b. Room Sequencing: When you have left the exam room, you need to know which patient is next — without asking the nurse. Outside each exam room is a room sequencing light. It keeps track of which patient was put in an exam room when. So when you come out of the current exam room and turn off the room sequencing light at that room, the room sequencing

light at the next room in sequence (i.e. the next patient who has been waiting the longest) will begin to flash.

7. Do not fetch things (i.e., You want to see an x-ray, have it brought to your Doctor's Dictation Station, do not go to x-ray to view it. If you have to go all the way over to the lab to use the microscope, have a microscope in your Doctor's Dictation Station.) The general rule is: "Things come to the doctor, the doctor does not go to things."

8. Make sure you have sufficient staff to maintain your patient flow. If the items you delegate to staff to manage routine patient flow requires 115 minutes per hour of staff time, you had better have 2 nurses helping you.

9. Set up the appointment book to bring in patients slightly faster (allowing for no-shows) than your potential patient per hour rate. Then show up on time and see your patients. If you run late, your reception room and parking lot will overflow.

To be efficient, it takes staff, space and systems. If any one of them is inadequate or inappropriate, then your maximum effectiveness will be dictated by the worst constraint.

Remember, it is your practice, your style. The techniques discussed in this article are designed to help you optimize your style, to give you greater control over how you spend your time. In one orthopedic practice, the doctor had delegated casting to a cast tech. However, the doctor felt that the casting time was an important doctor-patient bonding time. So when the patient needed to be casted, the cast tech prepared the patient, the doctor came in and held the limb while the tech applied the cast, and then the doctor left while the tech cleaned up. The doctor practiced medicine "his way," making maximum use of his time.

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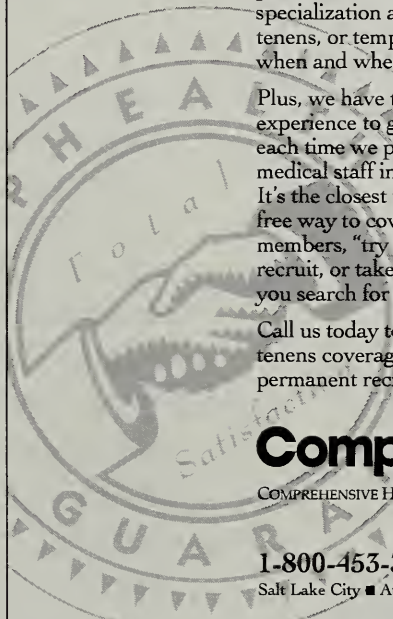
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Crisis in Health Care Delivery — Rescuing Medicine From the Clutches of Government

Miguel A. Faria, Jr., MD

*We're not in this to test the waters,
we are in this to make waves.*

MAE WEST

*Every leader needs to look back
once in awhile to make sure he
has followers.*

J. PAUL GETTY

IT IS NO exaggeration that the American health care system in general, and physicians in particular are utterly in a state of siege, perhaps I should use modern verbiage and call it a "veritable state of national emergency." The latest AAPS bulletin (May 1992) reports that administrative (unconstitutional) law may be thrown at physicians charged (not convicted) with medical fraud so that their assets i.e., homes, and offices may be confiscated during investigative proceedings potentially to include disputed Medicare sanctions or reimbursement issues.¹ Just when we thought that we have reached the nadir of our dilemma, threatened violation of our civil rights by government looms on the horizon.

The magnitude of the problem with our health care system is

One of the plans intended to rescue health care delivery provides a means of equitable access to medical care, preserves patients' freedom of choice, and restores individual responsibility without rationing care.

reaching gargantuan proportions and recently, in a moment of introspection, it conjured in me chiaroscuro (nightmarish) images of what it was like to have been a Roman citizen in the fateful year AD 476. The Roman citizens then were waiting for the inevitable, the abject surrender and fall of the City upon the Hill — we, today, for the

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collapse of the private practice of medicine.

It is time for us to counterattack in the battle for the best health care for our citizens and to rescue our profession as well from the clutches of government intervention. Otherwise, our adversaries and detractors will use real and/or perceived weaknesses in our health care system as an excuse to push us further into socialized medicine. And no counterattack, in my view, will be effective unless we address five crucial issues: (1) soaring medical costs (2) perceived high U.S. perinatal mortality, (3) care of the uninsured, (4) the medical liability crisis, and (5) physicians loss of civil rights (which I have discuss in another article).²

We should discuss these issues in juxtaposition with the fully socialized health care systems that we find today in Great Britain and Canada — health care systems which are beginning to unravel under the pressure of increasing costs and government inefficiency, infinite demand, limited resources, and unbearable taxation.

We have become overly dependent on government while making an infinite demand for medical services and technology. We have paid for our false expectations by allowing government to intrude in all aspects of our lives, including American medicine. Now government intrusion with interference in the patient-doctor relationship continues relentlessly in our bumpy ride toward full-scale socialized medicine.

The socialized health care systems in Great Britain and Canada are beginning to unravel under the pressure of increasing costs and government inefficiency, infinite demand, limited resources, and burdensome taxation.

With this background in mind, I will now briefly address four of those critical issues and discuss a promising set of solutions which have been proposed by two respected conservative thinktanks, proposals which have been made public yet have not been adequately or sufficiently explored by the policy makers, especially those who have the unqualified attention of the mass media.

We should militate for discussion of these health care issues because they are important. We as physicians have a singular responsibility in rescuing medicine, because if we don't, then others, who do not have the best interest of our profession at heart, will try to do it for us, to the detriment not only of us but of our patients.

Soaring Medical Costs

The issue of greatest contention in health care is not quality, as one might have presumed, given the medical liability crisis that engulfs us, but spiraling health care costs. Today, we spend \$750 billion annually on health care, including both private and public spending. There are several reasons for high medical costs and foremost among these are the recent proliferation of expensive medical technology, the expense of research and development of drugs, utilization and overutilization of medical services by health-minded citizens, and an increasing aging population. The medical liability crisis we will consider later.

Finally, it is no providential revelation that Americans have become dependent on government for security in various aspects of their lives and thus have come to expect infinite access to services. This includes medical services as well as highly expensive medical technology. The tendency toward socialization of medicine that began in 1965 with the Medicare Act has resulted in growing inefficiency, entangling red tape, burgeoning bureaucracy and interference in the previously sacrosanct patient-doctor relationship. The more money thrown upon the flames, the more blazing and glaring burn the consuming fire of government profligacy — not to mention progressive moves toward socialization, i.e., Medicare, Medicaid, DRGs and RBRVS.

Total health care costs are increasing at an average rate of 10% per year. This parallels government domestic spending and contributes to the U.S. record deficit, now nearing \$4 trillion. By the year 2000, the projected cost of health care will approach \$1 trillion annually.

This analysis would not be complete without a discussion of a crucial issue which is of paramount importance in the skyrocketing

cost of health care. Norbeck³ convincingly argues that self-destructive and abusive American lifestyles promote poor health and disease. He says that the wise old adage, "an ounce of prevention is worth a pound of cure," has gone down the drain. He also discusses the paradox that despite the punishment that we inflict upon ourselves in lives of self-indulgence, when the time of serious disease, or age-related infirmity, or even terminal conditions is upon us, we then cling tenaciously to life at any price. His figures are astounding:

(1) Regarding health: "80% of illnesses can be linked to smoking, alcohol consumption, illicit drugs, poor diet, obesity, and/or sexual promiscuity. Furthermore, 4% of the people in the United States account for 55% of *all* hospital costs.

(2) Regarding treatment of our senior citizens: "25-35% of medicare funds are spent on 5-6% of enrollees who will die within a year." Moreover, "85% of an individual's health care expenses occur in the last two years of life. Physicians have little control over such expenses. . . ."

The more money thrown upon the flames, the more blazing and glaring burn the consuming fires of government profligacy — not to mention progressive moves toward socialization.

(3) "Even our children are becoming more sedentary . . . 40% of children ages 5-8 already showing risk of heart disease. . . ."

(4) Furthermore, on compliance with medical advice: Adults who

have been advised to participate in "vigorous 20-minute exercises three times a week" hardly ever comply. He says "instead of the expected 60% compliance rate, a paltry 8% is the actual figure." Meanwhile "Americans are risking their health by eating too much fat, sugar, cholesterol, and salt, and not enough fruit, vegetables, and grain products." Moreover, 1100 people die daily as a result of chronic tobacco use.

Approximately 80% of illness can be linked to smoking, alcohol consumption, illicit drugs, poor diet, obesity, and/or sexual promiscuity.

Paradoxically, these same Americans, says Norbeck, "have a fierce desire to live as long as possible — the cost be damned"; meanwhile the doctor, hospital, and health care system are blamed for high health care costs. In fact, a whopping 1/3 of all health care costs is directly attributed to self-abusive and destructive lifestyles beyond the purview of medicine. Increased longevity and improved quality of life could therefore be accomplished by paying attention to dieting, exercising, and ceasing smoking while at the same time cutting down health care costs.

Finally, despite media hype, physicians' fees as a proportion of total health care expenditures have remained stable at less than 20% since 1950 through the 1980s. The latest figure is in fact 19%. Coupled this with the fact that for 7 of the last 10 years, physicians' fees have not even kept pace with inflation, physicians' fees are only a small portion of soaring medical costs.

High Perinatal Mortality

Another perceived and frequently cited problem of the American health care system is high perinatal mortality in the U.S. as compared to other industrialized countries. The truth is that when compared to other industrialized nations at any given high-risk birth weight, perinatal survival in the United States is substantially higher than in any other industrialized country including Japan and Norway, which tout the lowest overall infant mortality rates in the world.⁴

The problem in the United States is that we have a high percentage of low-birth weight and premature babies. Many of these unfortunate babies are born in a milieu of teenage sex, drug addiction, illiteracy, alcoholism, sexually-transmitted diseases, insufficient or total lack of prenatal care, and unhealthy lifestyles (i.e., the majority of teenage women who smoke continue to do so during their pregnancy).

Single parenthood, teenage pregnancy, and smoking have all been definitely linked to increased risk of prematurity and low birth weight babies, conditions which are more prevalent in the U.S. than in other industrialized countries such as Canada, Japan, and Norway. These socioeconomic problems are only marginally related to the practice of medicine and even less to quality medical care.

The Uninsured

The third and perhaps most pressing problem is that of the plight of the 34-37 million Americans who are uninsured and underinsured. This is the number of people who are actually uninsured in any given one month period either because of lack of affordability or portability of health insurance. Sixty percent of them are working adults and their families.⁶ Only 4% of the population lacks health insurance for 2 years or longer.¹⁵ There is a national consensus that

these people should not be forgotten and should be taken care of by society. So here I would like to discuss the basis for extending coverage and providing the means of access to everyone. Probing deeply, one finds that in the last decade, paradoxically, while the majority of the American public is willing to extend coverage to all in our society, when questioned further, less than a third are willing to foot the bill. It's also noteworthy that the public (70%) believes that any health care initiative must be associated with incentives for people to work.⁵ Seventeen percent of the uninsured and underinsured are unemployed, the other 57% are employed mostly in small businesses that do not provide insurance coverage. The rest are dependent children or those who are self-employed.⁶ Our long-term goals should not only be to preserve quality and make health care more cost effective, but also to provide access for all Americans.

It's not the bad doctors who most frequently get sued but those of us who treat the sickest patients who require the use of high-risk procedures and advanced technologies.

One more issue that needs mentioning is the lack of attention given to the charity or uncompensated care provided by American physicians. For instance, a recent AMA survey showed that American physicians provide \$11 billion dollars of uncharged care (or an average of 150 hours of care annually free of charge).⁷ Specifically, data from California shows that \$50,000 of uncompensated care is provided per

physician either *pro bono publico* or governmentally mandated.

The Medical Liability Crisis

The unrealistically high (and sometimes false) expectations of the American public to the degree of care that physicians and modern medicine can provide them is intricately related to the climate that has fostered the defensive medicine practiced by a large number of American physicians and to the medical liability crisis that threatens our nation. It's no secret that as a result of the adversarial, litigious climate in which medicine is practiced today, \$60 billion is spent annually in defensive medicine. Moreover, our society spends \$300 billion annually in litigation of all types, at least one-third of which, is deemed frivolous.⁸

In Canada, the merits of malpractice litigation are decided by a professional panel (a judge, attorney, and doctor) schooled in medical malpractice. We could take a lesson from them.

Furthermore, a myth that needs debunking is that litigation weeds out the "bad doctors." It's not the bad doctors who most frequently get sued but those of us who treat the sickest patients and who require the use of high-risk procedures and advanced technology that accrue to our various specialties. Unfortunately, since medicine is still an inexact science and sometimes things don't quite go as planned, a lawsuit is the result. Today, 20% of a physician's overhead is consumed in medical liability premiums. Moreover, litigation *per*

se is a major cause of increasing health care costs. For example, automobile accident victims who hire a lawyer "run up three times the medical expenses of people who don't."⁸

Much has been said about the Canadian health care system. The fact is that Canadian patients sue their doctors much less than Americans sue theirs — even though Canadian physicians do not practice better medicine than we do.

Moreover, their legal system has disincentives for medical litigation, i.e., plaintiff attorneys pay court costs when they lose in court; contingency fees are prohibited in some provinces such as Ontario; punitive damages are rare, and there is a cap on non-economic damages. The merits of malpractice litigation are decided by a professional panel (a judge, barrister (attorney), and an M.D.) schooled in medical malpractice — not by hand-picked impressionable jurors. The result is that Canadian physicians get sued only 20% as much as U.S. physicians, and they pay only one-tenth of U.S. malpractice premiums.⁹ To their credit, the AMA's "Health Access America" and Bush's "Health Care Plan" include malpractice tort reform in their respective packages.

Given this destructive litigation climate, I seriously believe that no plan, no matter how elegant and comprehensive, will solve the health care crisis unless medical liability tort reform is instituted as part of its overall package. But we must act now. The litigation explosion has unleashed a juggernaut which is unravelling the very fabric of our society and is now threatening to bankrupt our health care delivery system.

Socialized vs. "Private" Medicine

In contrast to what we may have been led to believe, our medical health care system is in part already socialized. For instance, in Canada,

74% of the country's health care expenditures are in the government sector. In the United States, it is already 42%. The debate therefore has implicitly centered on the degree of government intrusion and control of American medicine as an excuse to cut or bring down costs. Nevertheless, when adjustments are made for inflation and the following three facts are considered — that the Canadian economy has grown faster than the American economy in the last 20 years, the Canadian population is younger and has different demographics, that long-term health care is not included in Canadian statistics — *Canadian health care expenditures equal U.S. expenditures.*⁹

Canadian health care rose at an average annual rate of 10.6% compared to 10.3% in the United States. If anything, it is slightly higher than in the U.S. This is true even while Canada lags behind the U.S. in research, development, and medical technology.

In Canada, 74% of the country's health care expenditures are in the government sector. In the U.S., it is already 42%.

We must not lose sight of the fact that we have the best health care and the best medical technology in the world and should learn from its strengths as well as its weaknesses. The truth of this statement is self-evident, especially when the inescapable comparison is made with the socialized systems of health care elsewhere. It then quickly becomes obvious that while we continue to improve quality, socialized countries are stalled or pulling back from research and development, simultaneously reducing access.

If a Canadian-style public health insurance program were to be implemented in the United States, it would cost conservatively between \$250-\$350 billion annually in added health care expenditures. According to the Dallas-based National Center for Policy Analysis,¹⁰ whether this additional expenditure is funded by a payroll tax or through income taxing, the tax rate increase will be on the average 14%. If one opted for a consumption tax, the price of every food item and other commodity would be expected to rise 10% relative to income (as it did in Canada). If funded by the payroll tax, the tax rate would rise from its current level of 15% to 29%.

Interestingly, National Public Radio (NPR) on April 9, 1992, reported that record numbers of Canadians are crossing the border to buy goods and commodities such as milk, bread, and gasoline in the United States, because they are 25-50% cheaper here. Why? Several reasons, but most prominently, the media pundits admitted, was the high sales tax Canadians pay to support the much touted Canadian health care system. Canadians pay 55% in federal and provincial income taxes and an additional 15% sales tax on all items for a total taxation of 70%. In other words, with their recent tax increase, Canadians work for the government through mid-August each year before it's time for take-home pay.

One also should not lose sight of the fact that social democracies have lower health care costs by limiting available services, including spending limits and curtailing access to specialists. They also reduce utilization of available services by waiting lists and horrendous waiting lines, referred to as queues, and sometimes outright rationing. For example, in Britain during 1978, "33% of the dialysis centers refused to treat patients over the age of 55." And today, there are 800,000 patients waiting for surgery there.⁹ In

Canada, "the risk of waiting for heart surgery now exceeds the danger of dying on the operating table."¹¹ In Toronto alone, there are an estimated 1,000 people waiting longer than 1 year for coronary bypass surgery. Many are coming across the border to the United States to get their bypass surgery performed sooner. In Sweden, citizens pay 60% of their wages in taxes and wait in long lines for "free" medical care such as cataract operations, hip replacements, and heart bypass surgery.⁹

If Canadian-style public health insurance program were to be implemented in the U.S., it would cost between \$250-\$350 billion annually in added health care expenditures.

To be fair to the Canadian system, one should concede two advantages that they have over us. The first I have previously mentioned, and that is the much lower rate of medical malpractice litigation. The other is that 70% of Canadian physicians are in primary care service. In the United States, our more technologically-prone medical system is the reverse: 70% specialists versus 30% primary care physicians.

As alluded to earlier, American medicine by many parameters could be considered already socialized, i.e., government control via the RBRVS, DRGs, Medicare and Medicaid extrapolation, and even the perpetual threat of sanctioning and intimidation — all of which have made medicine lose its former luster. I don't have to remind the reader that by whatever parameter we use, dissatisfaction is

rampant in the medical profession today.^{1,2,4} The layman assumes that we practice laissez-faire medicine, but that is not the case. What separates us from total socialization and control is the fact that we have multiple third-party payors; whereas, socialized medicine has come to mean a single-payor system — the government — and it goes by the falsely reassuring name of National Health Insurance. But multiple third-party payors will not prevent the further socialization of American medicine. The trend needs immediate reversing. What is the role of government? My answer here parallels the AMA's *pronunciamiento* that government does have a role in health care: to provide a formula utilizing the private sector to promote universal access at competitive affordable costs while preserving quality health care.⁷

The Solution

It is ironic that while other countries are moving away from Marxist ideology, we in the United States continue to march, in evolutionary fashion, to the drumbeat of socialist policies in health care, despite obvious failure of government interference in medicine. It should be noted that despite a steady barrage of unfavorable publicity, our health care does take care of 84% of all Americans (who are insured) and two-thirds of these are satisfied with their health care.⁷ We must also remember that over 50% of Nobel Peace prize winner awarded in Medicine and Physiology have been won by Americans.

Yet, calls for the dismantling of our system are urged and heard from all quarters. The gate is about to fall with the result that the status quo will not be allowed to stand. We can make a good situation out of a potentially catastrophic one. We should revamp the U.S. health care system by rescuing the overburdened American public and its physicians from the clutches of government control.

Toward this goal, Dr. Robert Moffit and others at The Heritage Foundation, and Dr. John C. Goodman and associates of the National Center for Policy Analysis have proposed consumer-oriented free market approaches to health care which deserve serious consideration.^{10, 12, 13} Moffit's plan emphasizes expanded insurance coverage, while Goodman's encourages individual choice and responsibility.

I have borrowed from these innovative proposals to discuss "the solution" which can be summarized as follows: A *voucher* system is used for patients that cannot afford health insurance and a *refundable tax credit* for those who can. A *medical savings account*, "Medisave," is then created in which money can be put aside for routine medical care costs, tax free, and out of the reach of government. The Medisave account along with high-deductible insurance, which can be used for truly catastrophic illnesses or major surgery, would be the backbone of the program. High-deductible insurance for catastrophic coverage would be available to individuals at reduced rates and bought from savings in the Medisave accounts or from the tax credits or vouchers.

Americans would have an incentive to conserve because they would be allowed to keep the money that they do not spend from the Medisave account (it can only be used for medical reasons, or alternatively, it can be rolled into a pension fund). Thus, patients would use free market techniques to control costs (as they do with everything else when they act as consumers), while at the same time being in charge of their own health care. Everyone would have the incentive and the means to provide for their health care free of governmental interference. The government then provides the means of access but does not otherwise inter-

fere in patient care — except in public health, promotion of healthy lifestyles, research and development, and overseeing that the profession polices itself.

The bedrock of the system is that it preserves patient choice of physicians and the patient-doctor relationship while restoring physician and patient autonomy. Several bills borrowing ideas from these proposals have been introduced in Congress including the "Health Care Saving Plan Act of 1992" (HR 4130) which was introduced by Rep. Rick Santorum (R-PA) with 18 co-sponsors including Newt Gingrich. The bill calls for a "Medisave account" with a tax free \$4800 per year, plus \$600 for each dependent. This plan is estimated to save \$147 billion per year from U.S. health care expenditures and a further \$33 billion per year in administrative costs.^{4, 10}

With this approach, Americans will not only have the incentive to save but will also remain in control of their own health care, free of government interference. The plan provides a means of equitable access to medical care, it preserves patients freedom of choice, and restores individual responsibility without rationing health care.

Competition will bring doctors and hospital prices down, because the rules of the competitive marketplace will then truly be in effect. This is not the case now.

I will add that insurance and medical liability tort reform will be imperative if this plan is to succeed. Likewise, medical ethics, compassionate care, and peer review will also be given a new impetus to maintain the standards of the profession.

I propose, therefore, that we refer to this system as the **Patient-Oriented Free Market approach** to health care when it is coupled with a reinvigoration of medical ethics and the virtues of compassionate physicians as well as meaningful medical liability tort reform. Histori-

cal precedent establishes no inconsistency in a marriage between free market principles and ethical compassionate care.¹⁴

I urge all Georgia physicians to be well-informed and involved in organized medicine. The health care of our patients now and that of our children in the future are at stake. Let us stand up and be counted for the restoration of the principles of our noble profession which can only be accomplished by stemming the *red* tidal wave of government control and over-regulation in medicine. Let us be aggressive in striving for the Patient-Oriented Free Market approach to health care before it is too late.

References

1. Association of American Physicians and Surgeons (AAPS). News Bulletin, May, 1992.
2. Faria MA. Enemies of private practice bide their time. *Private Practice* 1992;24:33-34.
3. Norbeck TB. Telling the truth about rising health care costs. *Private Practice*, February, 1990.
4. AAPS. News Bulletin (Supplement). March and April, 1992.
5. Blendon RJ. What should be done about the universal poor? *JAMA* 1988;260:3176-3177.
6. American Medical Association. Advocacy Briefs. Oct 1991.
7. American Medical Association. Health Access America. November, 1991, p. 1-15.
8. Olson W. The Litigation Explosion: What Happened When America Unleashed the Lawsuit. Truman-Talley Books, Dutton, New York, 1991.
9. Lee RW. Free medicine. In, *The New American*, 1991. General Birch Services Corporation, P.O. Box 8040, Appleton, WI. 54913.
10. Goodman JC. An agenda for solving America's health care crisis. 1991, National Center for Policy Analysis, 12635 North Central Expressway, Suite 720, Dallas, TX 75243. 214-386-6276.
11. Tanner MD. Commentary. Georgia Public Policy Foundation. February 10, 1992.
12. Moffitt R. Comparable worth for doctors — A severe case of government malpractice. 1991, The Heritage Foundation, 214 Massachusetts Ave. NE, Washington, DC 20002. 202-546-4400.
13. Moffitt R. Consumer choice in health: learning from the federal employee health benefits program. 1992, The Heritage Foundation, 214 Massachusetts Ave., NE, Washington, DC 20002. 202-546-4400.
14. Faria MA. The forging of the Renaissance physician, Parts I-IV. *J Med Assoc GA* 1992;81 (3) (4).
15. Swartz and McBride. Spells without health insurance: distributions or durations and their link to the point-in time estimates of the uninsured. Blue Cross Blue Shield, Fall 1990. Cited by MD Tanner in, Individual medical accounts, a consumer oriented health proposal. Georgia Public Policy Foundation, May 1992.

Grady Memorial Hospital Centennial: History and Development, 1892-1992

Asa G. Yancey, Sr., MD

GRADY MEMORIAL Hospital embodies, exemplifies, and portrays the greatness of the United States of America and the Constitution of our nation, in that 100 years ago it began as a small segregated hospital, and today it has expanded to an approximately 1,000-bed medical center with a multi-ethnic medical staff, nursing staff, administration, and trustee body.

The Contributions of Henry W. Grady

The Grady Hospital was so named in order to commemorate the life and greatly needed, essential works of Henry Woodfin Grady (Figure 1) who made meaningful the phrase, the New South.^{1,4} This concept emphasized to the southeastern section of our nation the desire for an industrial, manufacturing economy in conjunction with the existing agricultural lifestyle. The term implied both economic uplift and national reconciliation. During his brief life of only 39 years, Grady frequently urged the construction of a hospital in Atlanta for low and no-income people.^{1,4,7}



Figure 1 — Henry W. Grady (from *Life of Henry W. Grady* by Joel C. Harris).

This paper was presented at Grand Rounds, Emory-Grady Departments of Surgery and Gynecology-Obstetrics in conjunction with Hamilton E. Holmes, MD, Medical Director. Dr. Yancey, who is now retired, was Medical Director, Grady Memorial hospital, and Associate Dean, Emory University School of Medicine, 1972-1989. Send reprint requests to him at 2845 Engle Rd, NW, Atlanta, GA 30318.

Henry W. Grady was born in Athens, Georgia, on May 24, 1850, and died in Atlanta of pleuro-pneumonia on December 23, 1889.⁴ His parents were middle income people who owned land and five slaves (Figures 2 & 3). His father, William S. Grady, lost his life in the service of the Confederate Army. The younger Grady graduated from the University of Georgia, Athens, in 1868 and did graduate study at the University of Virginia, at Charlottesville.²⁹ He was an all-around athlete and loved baseball. One of his characteristics as a boy that remained with him throughout his life was his love and sympathy for the poor and lowly.^{1,29} He was widely regarded by his peers and friends as a kind and gentle person who was actively sensitive to the plight of the poor and those in need and whom he helped consistently.^{1,15} His boyhood special friend, Julia King, became his bride (1871) early in life.^{2,15,29}

His famous "new South" speech, delivered on December 22, 1886, at the Annual Banquet of the New England Society in New York City¹⁷

catapulted Grady to national fame as an orator and spokesman for the New South.^{1, 4, 15} A quotable quote from his speech entitled "The Race Problem in the South," delivered at the Annual Banquet of the Boston Merchants' Association on December 12, 1889, as he discussed reconciliation incidents North and South is, "If society, like a machine, were no stronger than its weakest part, I should despair of both sections. But

Grady frequently urged the construction of a hospital in Atlanta for poor people. One of his characteristics as a boy that remained with him throughout his life was his love and sympathy for the poor and lowly.

knowing that society, sentient and responsible in every fibre, can mend and repair until the whole has the strength of the best, I despair of neither."^{1, 17, 29} Grady was severely ill with an upper respiratory infection several days prior to making this speech.²

Lest anyone mistakenly believe that Henry Grady's contributions were those of oratory only, let us be reminded that: 1) Grady founded the Young Men's Library Association which later became the Carnegie Library; 2) established the Y.M.C.A. in Atlanta; 3) motivated the Atlanta Exposition; 4) was one of the leaders who brought Georgia Tech to Atlanta⁴ in a competitive effort rather than locate it in either Macon, Athens, Milledgeville, or Penfield; and 5), again, he urged the construction of a hospital in Atlanta for the care of the indigent patient population of the City of Atlanta.

Taxable wealth in Georgia in-

creased about \$120,000,000⁴ in less than 10 years as Grady championed the industrialization of Georgia and the new south. Grady's thoughts, beliefs, and views were expressed in the context of the mores of the era in history in which he lived. Accommodation characterized his vigorous efforts.² He used his great powers as an orator to strive for an amiable solution to the North-South problems and to further national unification. In an effort to weave all of those complexities into a single pattern, his statements were, at times, at variance with the facts of human existence and the realities of the difficult human relations of those years.

Grady's own words to his mother in one of his last conscious moments were, "If I die, I die serving the South, the land I loved so well. Father fell in battle for it. I am proud to die talking for it."¹⁶ Upon his death, his many friends cherished the memory of this great orator and journalist (he had been managing editor of *The Atlanta Constitution*.) by erecting a 25 foot bronze statue on Marietta Street; constructing the Grady Hospital (Figure 4); and naming after him a county, an Atlanta public school, a hotel, and the School of Journalism at the University of Georgia, Athens.²

The Building Begins

The cornerstone of the original Grady Hospital was laid one year after Grady's death on December 23, 1890. The inscription thereon reads "Erected in Memory of Henry Woodfin Grady. He whose Heart was so Easily Moved by Others' Woes Would Ask No Fitter Monument."¹⁶ This three-story building, now called Georgia Hall (since 1959), located on the corner of Butler and Coca-Cola Streets, cost \$105,000. The volunteer ladies who worked to build the hospital inspected it on May 24, 1892 (Grady's birthdate). It was dedicated on May 25, 1892, and received its first patient on June 1, 1892. There were

100 beds for indigent patients,³³ and 10 beds for private persons.⁴ Funds were obtained from many private donors; Jacob Elsas; Joseph Hirsch;⁴ proceeds from the sale of the Atlanta Benevolent Home;³⁰ and City Council appropriated \$30,000.⁴

There was one operating room with an amphitheater of 100 seats for students and staff. Dr. A.W. Calhoun said the operating room was the best he had ever seen. Students were charged a small fee for watching a procedure.³² The white male and female wards (Figure 5) consisted of 22 beds each; the children's ward, 20 beds; the colored male and female wards, 16 beds each; and there was an isolation ward of four beds.

Ten Trustees served without compensation. The first chairman/president of the Board of Trustees was Captain J.W. English.³⁵ The House Staff consisted of four physicians whose term of service was 2 years, with appointment by competitive examination. One pharmacist, a supervisor of nurses, four graduate nurses, and 16 undergraduate nurses completed the health care staff. The ambulance service extended to every part of the city. Medical students studied patients on the colored wards beginning in 1892 and on the white patients beginning in 1931 in the Butler Street Building.

His famous speech in 1886 in New York City catapulted Grady to national fame as an orator and spokesman for the New South.

The 1890 cornerstone of the original Grady Hospital Building was removed in March, 1992, by Dennis Ballou. The contents consisted of a book of Grady's speeches, a book



BIRTHPLACE OF GRADY IN ATHENS

His mother is standing in front of the fence

Figure 2 — Grady's birthplace, Athens, Georgia (from Henry W. Grady, *Spokesman of the New South* by Raymond B. Nixon).

containing poems, and a copy of *The Atlanta Constitution* dated December 23, 1890. They were loose in a hollowed out portion of the cornerstone and not in a water resistant container. Water had seeped into the area. Everything was wet, stuck together, and very badly deteriorated. A page of the December 23, 1890, issue of *The Atlanta Constitution* stated, "The Cornerstone of the Grady Hospital to be Laid Today." "And this is the anniversary of his death."³⁰ There is some speculation that a portion of the original manuscript for his December 12, 1889, speech was in the cornerstone, but it has not yet been identified.

Since its beginning in 1892, each clinical building of Grady Hospital has promptly filled to capacity, and beyond, and this continues to this very date. A children's ward (Figure 6) was added in 1896 and the Order of Old Fashioned Women donated funds for a Maternity Ward which opened in 1903. A bond issue was passed by the City of Atlanta in 1910, and the Butler Street

Building, (Figure 7) an annex for white patients, was opened in 1912. This building was demolished in 1990 and currently an imaging center for the Department of Radiology is under construction at that site.

Educational Endeavors

Nursing is a very important and essential department for any hospital. Grady Hospital received a charter for beginning the Grady Hospital Training School for Nurses on March 25, 1898.^{13, 21} The first graduating class was in 1900 and consisted of seven young women. One of the best known Directors of the Nursing Service was Annie B. Feebeck (Director of Nurses for over 30 years) (Figure 8) after whom Feebeck Hall was named.⁹

The Municipal Training School for Colored Nurses began in 1917. Ludie Andrews (Figure 9) won the R.N. diploma status for colored nurses. The two schools merged in 1964. The peak enrollment of student nurses was 614 students in September, 1963. The first male student was accepted in 1965. Because of increased costs, the

greater emphasis on the B.S. degree in nursing, and the rise in tuition caused by the decrease in enrolled students, the Grady School of Nurses closed in 1982.²¹ Grady nurses were well received the nation over, and highly acclaimed for the bedside care of patients.

Buildings of the Grady Campus, initially associated with the Nursing Department as student residences, were: Hirsch Hall, dormitory, 1922; Feebeck Hall, 1944, which presently houses the Diabetic Day Care Center and Family Planning Center; Piedmont Hall, 1946; Armstrong Hall, 1960; and Florida Hall, 1922, which was originally used for the isolation of venereal diseases, then in 1945 for care of poliomyelitis patients, in 1958 as a residence for nurses, and currently for drug addiction.

John G. Westmoreland, M.D., in 1853 requested of the Georgia Legislature a charter for the Atlanta Medical College which was granted on February 14, 1854, and 78 medical students enrolled in May, 1854. Westmoreland was Dean 1854-1861. Beginning in 1856, (Figure 10) on the northwest corner of Butler and Armstrong Streets,³ the first building of the Atlanta Medical College was constructed and later extending north on Butler Street, buildings were developed and occupied by proprietary medical schools,^{7,8} namely, the Atlanta Medical College, 1856; the Southern Medical College; the Atlanta College of Physicians and Surgeons; and the Atlanta School of Medicine. Merges and name changes resulted in revival in 1913 of the original 1854 name of the Atlanta Medical College.⁸

It became increasingly obvious that medicine is practiced best when medicine is taught and that the Atlanta Medical College needed an endowment, university connections, and hospital facilities. In 1915, these buildings, the corner one constructed in 1907,³ (Figure 11) were legally acquired by and

converted into the Emory University School of Medicine.^{7,8} Emory got its start right here at Grady Hospital and Grady has been working with Emory from its very first day.⁷ The adjacent J.J. Gray Clinic building was added in 1917 and used as an outpatient clinic for colored patients. Presently, this is the Woodruff Research building on Armstrong Street. The Emory freshman and sophomore students were moved to the Emory Campus in 1917; the junior and senior years continued to be taught in the Grady area.⁸ In 1921, these previous Atlanta Medical College buildings, now Emory University School of Medicine structures, were leased to Grady Hospital and converted for inpatient use for colored Grady patients with their treatment under the supervision of the Emory faculty.⁸ Upon opening of the new Grady Memorial Hospital in 1958, the upper two stories of the building of The Atlanta Medical College were removed, and the remaining structure capped over for use in animal research. The white and colored sections of Grady had separate medical staffs until 1944, at which time a single staff was organized at Grady. The residents preferred working on the colored side for greater clinical experience. The familiar name, "The Gradys," plural, was well founded.

Emory University School of Medicine is a very young school—no longer in duration than the common life span of a solitary American citizen, if the founding year is regarded as 1915.⁸ However, Emory University School of Medicine celebrated its centennial in 1954. Obviously, there are those who date the founding of Emory University School of Medicine back to 1854 at the time of the beginning of the proprietary medical school, namely, the Atlanta Medical College.³ Emory University School of Medicine's growth has been amazing. The patient care by Emory at

Grady and the support of Grady Hospital, in general, have been excellent and are major factors in Grady Hospital being listed by the *Wall Street Journal*, *Family Circle*, *Ladies' Home Journal*, *Business Week* magazine, etc., as one of the nation's top 24 hospitals, or other commendations.

In 1938, Grady Memorial Hospital, which was the primary training facility for general surgery residents, was approved as a Category I Hospital for a 5-year graduate education program in surgery,⁸ which included the 1-year internship. During 1961, the two residency programs of Emory University Hospital, the Veterans Administration Hospital, and Grady Memorial Hospital were united under the inspired leadership of J.D. Martin, Jr., M.D., to form an accredited program of graduate education in surgery, consisting of Grady Memorial Hospital,⁸ Emory University Hospital, Veterans Administration Hospital, and Egleston Children's Hospital. Crawford W. Long Memorial Hospital of Emory University was added in the early 1970s. Leading medical students throughout the nation have been attracted to the Emory-Grady residency programs.

Grady Hospital was initially owned and operated by the City of Atlanta and a private self-perpetuating Board of Trustees, but in 1921, a Committee associated with the Atlanta General Council assumed these duties and responsibilities. Thomas K. Glenn, after whom the Glenn building (erected 1954) at 69 Butler Street is named, provided the leadership and urged the Georgia General Assembly to establish the Fulton-DeKalb Hospital Authority, in order to keep Grady Hospital removed as far as possible from political influence.

The General Assembly approved the concept of the Fulton-DeKalb Hospital Authority in March, 1941, and the Authority came into existence in August, 1941, with Glenn as the first chairman. The Fulton-DeKalb Hospital Authority is the Trustee-Ownership Body for Grady Memorial Hospital. World War II caused delays, so the contracts between the Authority, Fulton, and DeKalb Counties were signed June 4, 1945 — with actual operations beginning January 1, 1946. Funding for the maintenance of Grady Hospital came from the City of Atlanta from 1892 to 1946. Since 1946, funding has come from Fulton and De-



Figure 3 — The elegant home wherein H.W. Grady grew up suggests an upper middle-class family income. (from *Life of Henry W. Grady* by Joel C. Harris).

Kalb Counties. The Albert Steiner Building was completed in 1924 for the diagnosis and therapy of cancer. It was deeded to the Fulton DeKalb Hospital Authority effective January 1, 1946.

**The first chairman/
president of the Board
of Trustees was Captain
J.W. English. The
House Staff consisted of
four physicians whose
term of service was 2
years, with
appointment by
competitive
examination.**

Operations Details

In the Annual Report of Grady Hospital for the calendar year ending December 31, 1900 (earliest Annual Report discovered),⁵ there were 2,140 ambulance trips, and 2,370 admissions, of which 234 were pay patients and 2,136 charity. There were 933 white patients and 1,002 colored patients. There were 309 gynecological⁵ admissions. There was no obstetrical ward. The total hospital expenses were \$32,965, of which pay patients contributed \$4,589, resulting in a cost to the city of \$28,375. Drug habituation treated — alcoholism, 24; cocaine, two; morphine, four; opium, two. In 1910, gynecology was dominant,⁶ — what with only 61 deliveries and the Department was referred to as the Gyn-Ob Department.⁶

A review of the Annual Reports of Grady Hospital at about 10 to 20-year intervals up to the Annual Report for the calendar year ending December 31, 1991, revealed multiple problems of overcrowding, a

steady and a huge increase in hospital admissions, outpatient visits, and the variety of services offered, as compared with the year 1900. Time will not permit a detailed statement of the interval statistics, but for the calendar year 1991, there were 864,733 outpatient clinic visits; 43,284 total admissions; 3,082 surgery admissions; 1,340 Gyn admissions; 8,049 Ob and Ob Labor Service admissions; and 44,170 ambulance transports. The total hospital expenses for the calendar year 1991 were \$302,500,000.³⁴ Cocaine-related patients totaled 384 in 10 months of 1988 which projects to 460 for the year. Of interest, during the years of the great depression, 1928-1933, the number of patient treatments more than doubled (from 41,149 to 91,408) while the budget/expenses decreased (from \$523,544 to \$486,126) by about 7%.²⁷ In 1905, the gross cost for one day per patient was \$1.26, net cost \$1.08.²⁸

Discussion of plans for a new, immensely enlarged Grady Memorial Hospital began in 1933. Construction started March 18, 1954;

the cornerstone was laid December, 1955; building was completed and occupied on January 28, 1958. The first operation was an appendectomy by Chief of Surgery, Ira A. Ferguson, Sr.¹⁴ The new Grady consists of 21 stories; has a floor space of 27.6 acres; 1,100 beds; 17 operating rooms; cost \$26 million, including equipment and the large outpatient section of the building. Each side was constructed as a mirror image of the opposite portion in support of state and national segregation regulations, except for the x-ray department and operating rooms. The hospital was desegregated June 1, 1965.

J.W. Pinkston, Jr., conceptualized and pioneered plans for the Renovation and Expansion Project of the new Grady Memorial Hospital beginning in 1982-1983, with an estimated cost of \$69 million and at the tender hospital age of 25 years. Out-of-date design factors, current demands for more privacy and space prompted the renovation program. Steel and steel reinforced concrete and brick buildings are generally regarded as permanent, sturdy, and very long lasting. How-



Figure 4 — Original Grady Hospital building, now called Georgia Hall. (photo from Annual Report of Grady Hospital, year ending December 31, 1900).



Figure 5 — White female ward. (from Annual Report, Grady Hospital, year ending December 15, 1910).

ever, a frail human body, living an average of 77 years, and not infrequently 100 years, will commonly outlast many brick, steel, and concrete buildings. The Authority approved the massive project and work on the Renovation and Expansion Project began in 1988 with a budget of about \$283 million, which soon increased to \$318 million. The contract was let for the construction of the Piedmont Parking Deck. Completion of this Renovation and Expansion Project is scheduled for late in the year 1995.

The Atlanta Urban League, led by Grace Towns Hamilton, reported in 1947 that many (estimated 90,000) colored (due to sufficient financial resources) were not eligible for treatment at Grady.³⁸ Hughes Spalding, Sr., (Chairman of the Authority) supported the proposition of a private Negro hospital associated with Grady Hospital, a hospital within a hospital.⁴ The 130-bed Hughes Spalding Pavilion of Grady Memorial Hospital was dedicated in June, 1952, for private Negro patients and the accredited specialty education of colored physicians. Its Surgical Service (Chief of Surgery, the Author), be-

ginning in 1958, provided the first accredited surgical education for colored physicians in the State of Georgia.¹⁰ There was a total of seven residents, of whom three successfully completed the examinations of the American Board of Surgery and one succumbed to heart disease at an early age. Emory-Grady residents rotated on this service for several months. As hospital desegregation occurred, bed occupancy decreased, expenses exceeded income, and with two other predominantly¹¹ black hospitals in Atlanta (all greatly in need of patients and increased income), Hughes Spalding was closed on October 28, 1988, and the building became an integral part of the Grady Campus. It was renovated as a children's hospital in 1990-1992.

The Morehouse School of Medicine (MSM) was founded in 1975. Its rate of growth has been very rapid and its performance sound and superb. At a press conference in 1984, with documentation, MSM became a partner at Grady Memorial Hospital with the commitment by the Fulton-DeKalb Hospital Authority (Trustees of

Grady Memorial Hospital) and Emory University that MSM would equitably have patient care, medical student teaching, residency education, and clinical research activities at Grady Memorial Hospital for up to 50% of the Institution.^{19,20} A 5-year agreement was reached in 1986-1987 whereby Emory University would teach the junior year Morehouse students until the 1991-1992 academic year. A new 30-year contract was signed between the Fulton-DeKalb Hospital Authority and Emory University which was effective with the two counties, in 1984. A Liaison Committee³⁹ was established in 1985, consisting of the Deans of both medical schools with the Grady Medical Director as Chairman, to assist MSM for equitable assimilation into Grady Hospital. Meetings were held monthly.

Grady Hospital was initially owned and operated by the City of Atlanta. . . . The General Assembly approved the concept of the Fulton-DeKalb Hospital Authority in March, 1941.

An inclusive, major contract, in addition to the several written mutual agreements, was consummated with the Morehouse School of Medicine in 1991. On September 1, 1990, a 30-bed ward was assigned to MSM Surgical Department with surgical residency education expected on July 1, 1991. Due to factors of a need for residency accreditation, the expectation and hope for surgical residency education has been delayed until July 1, 1993. The accredited Morehouse Medical Department began the residency education of 13 residents in inter-



1896 This is the rubber-tired, horse drawn ambulance, photographed in front of the children's ward which was opened in 1896. As soon as the driver came in from a hard run, he unhitched his team and replaced the horses with a fresh pair. There was a fifth horse which was kept as a "spare."

Printed by Grady Memorial Hospital Printing Department

Figure 6 — Grady Hospital children's ward, upper right; original Grady Hospital, upper left; Grady ambulance, lower center. (photo from Grady Hospital printing department).

nal medicine on July 1, 1992. An MSM Obstetrical-Gynecological service began on July 1, 1992. Family practice has utilized the Grady Pediatric wards for residency education for several years and psychiatry serves with legal psychiatry and will serve in the Grady Psychiatric Emergency Clinic. Grady Hospital is essential, at this time, to the development of accredited residency teaching programs for the Morehouse School of Medicine in surgery, medicine, pediatrics and obstetrics-gynecology.

A Litany of Activities and Accomplishments

A litany of new health care service¹³ additions, occurrences, and accomplishments may be noted, such as: over 10,000 physicians have been educated at Grady Hospital since 1915; approximately 25% of the physicians in Georgia re-

ceived part of their medical education at Grady Hospital; Margaret Mitchell, famous author of *Gone with the Wind*, was a victim of a taxi-pedestrian accident on August 11, 1949, on Peachtree Street and succumbed five days later at Grady on August 16, 1949; Goddard Chapel; care of high risk mothers and infants, Federal grant 1965; first artificial kidney in Atlanta; Kidney Transplant Program; Nephrology Center; first blood bank⁴ in Atlanta, 1937; cardiac catheterization laboratory; emergency psychiatric clinic; poison control center; five Emergency Clinics based on specialty; established intensive care units; disaster planning, action and trauma center; Winecoff Hotel fire, December 7, 1946, with a loss of 119 lives, Grady "wrote³⁷ a new chapter in its services to the people of Atlanta;" emergency x-ray rooms; physical medicine and rehabilitation unit; air-conditioning

of entire Grady Hospital (originally only the operating rooms and x-ray department were air-conditioned); enlargement of Anesthesiology department; enlargement of clinical laboratories; computerization of the clinical laboratories, pathology reports, radiology reports and beginning computerization of the medical records; C.A.T. scan; Hospice; Newborn I.C.U.; adolescent ward; open heart surgery; psychiatric wards and legal psychiatric evaluations; hospital inpatient and outpatient departments, all in the same building; sent health aid to Gainesville, Georgia, after Georgia's worst tornado on April 6, 1936, with 200 dead, 1,200 injured, and property loss of \$5 million; Grady budget frequently only half that of comparable size hospitals; family physician to thousands of indigent patients who cannot afford to go elsewhere for health care; many patients come to Grady who can afford private care, elsewhere; burn center; first Negro intern, 1963-1964; Emory affiliation made possible many programs; 1921, first resident physicians appointed; 1930, Emory University Faculty chosen to operate entire Grady Hospital professionally; established satellite/neighborhood clinics—1973, Grady Rockdale/Northwest; 1975 W. T. Brooks East Point; 1976 Dekalb Grady Clinic and North Fulton Clinic in Roswell; 1973, new four deck parking facility on Butler Street; steam plant, 1956; new laundry completed in 1970; first eye bank in south, September 16, 1949, Grady Clay Memorial Eye Clinic; Sickie Cell Clinic; Day Care Center, Hirsch Hall; Patient Education TV; purchased the J.J. Haverty Building; Ultra sound imaging; Special Hand Clinic; Angel II High Risk Infant Transport; Respiratory Care; Family Planning; Diabetes Day Care Center; Crestview Nursing Home; Loughlin, Jr. Radiation Oncology Center; Hughes Spalding, Sr., Children's Hospital; Imaging Center; Infectious Diseases Clinic,

which will include Human Immunodeficiency Virus (HIV) positive patients; new clinical building under construction, which will include a Labor and Delivery Suite, operating rooms, recovery rooms, pharmacy and outpatient clinics; Drug Dependency Unit; Ambulance and Materials Management Department Building; Maternal and Child Health Pavilion; tunnels³⁶ connecting the Imaging Center, Spalding and Grady Hospital; Grace Towns Hamilton Obstetrical Pavillion; etc.

Personal Notables

Chiefs of Surgery at Grady Hospital and Chairmen of the Department of Surgery, Emory University were: Daniel Collier Elkin, Chairman, Emory Department of Surgery, 1930-1954; John Howard, Chairman 1955-1956; Ira A. Ferguson, Sr., Chief of Surgery, Grady Hospital; John D. Martin, Jr., Chairman of Surgery, 1957-1971; M.J. Jurkiewicz, Chief of Surgery, 1973-1977; Edward L. Bradley, III, Chief of Surgery, 1980-1982; W. Dean

Warren, Chairman, 1971-May 1989, Researcher, Teacher, Administrator; Roger T. Sherman, Chief of Surgery, Grady Hospital, 1983-1992; William C. Wood, Chairman of Surgery, 1991-. The following were part time surgeons at Grady: Frank K. Boland, James L. Campbell, W.F. Westmoreland, William Perrin Nickolson, J. McF. Gaston, and William S. Elkin. The earliest discovered Chiefs/Attendings in Gynecology-Obstetrics at the Grady Hospital and continuing to present are as follows: V.O. Hardin, 1901;^{6,25} John G. Earnest, 1901; George H. Noble, 1901; W.A. Crowe, 1910; William S. Elkin, 1915, appointed by the Chancellor of Emory University as Chief/Chairman of Gynecology; Dr. William S. Elkin was the first Dean of Emory University School of Medicine, 1915-1925;³ Edward C. Davis, Chairman/Chief of Ob-Gyn Dept., 1916-1921; William S. Elkin, Chairman/Chief Ob-Gyn, 1922-1925; James R. McCord, Chairman/Chief, 1926-1945; James B. Cross, Acting Chairman/Chief, 1946-1953; R.A. Bartholomew and W.R.

Holmes, top faculty, 1949; William L. Caton, Chairman/Chief, 1953-February 2, 1957 — first full-time Chairman at Emory and Chief at Grady Hospital; James B. Cross, Chairman/Chief, February 3, 1957-July 23, 1961; John D. Thompson, Chairman/Chief, 1961-February 28, 1986 - Markle Scholar and Georgian who further organized the Department, established several subdivisions, training programs and services within the Gyn-Ob Department; Luella M. Klein, Chairperson/Chief, March 1, 1986-1992. Dr. Klein, 1984-1985, served with distinction as the first female president of the American College of Ob-Gyn. On March 1, 1986, she was the first woman to chair a major clinical department; (The first female medical student, Elizabeth Gambrell, enrolled at Emory in 1944.) and John A. Rock, 1992-.

Gyn-Ob Department Notables

Some of the subdivisions, specialized training programs, services, items of interest and accomplishments by the Gyn-Ob Department may be noted below.²⁵

1. First Emory-Grady resident finished the Gyn-Ob Training Program in 1926 with a total of about 195 up to 1979. In Georgia, about 25% of Gyn-Ob practitioners were educated in the Emory-Grady Program. Currently, at Emory-Grady, there are some 45 approved residency positions, one of the largest programs in the nation.

2. Annual Resident Research Day Program — first held in 1967 and continuing. Approximately 30 papers are presented which constitute a tremendous teaching, research, and learning experience.

3. First Emory-Grady post-graduate seminar by Gyn-Ob Department was held in November, 1961.

4. Entire clinical teaching program for undergraduate and graduate Gyn-Ob education was assigned to Grady Hospital in 1963-1964. Rotation to Emory University Hospital of residents contemplated in 1964 and begun in 1965.



New Grady Memorial Hospital, 1958

Figure 7 — Lower left, Butler Street Building; upper center, the new Grady Memorial Hospital, 1958; lower right, roofs of buildings of the colored portion of Grady Hospital. (photo, 1958, from *Atlanta History, A Journal of Georgia and the South*; Vol XXXVI; No 1; Spring 1992; pages 40-53).



Figure 8 — Annie Bess Feebeck, Director of Nursing and Nursing Education for over 30 years. (photo from *White Caps*, Grady Memorial Hospital School of Nursing, 1982).

5. Special intensive, comprehensive, high risk, maternity care program started in 1965 with W. Newton Long as Director of the Maternal and Infant Care Project.

6. Fourth year added to residency program in July, 1966.

7. Luella Klein joined faculty, again, July 15, 1967 and became Director of Maternal and Infant Project. Lowest premature and perinatal mortality rates ever at Grady achieved in 1977.

8. Robert A. Hatcher appointed as full-time Director of Family Planning, October 1, 1968. Jacob B. Adams joined faculty October 1, 1969 for service in Family Planning. Family Planning moved to Feebeck Hall in 1975.

9. Elizabeth Sharp, Ph.D., joined faculty October, 1970, as a certified nurse-midwife with midwifery acceptance at Grady and growth to delivering 20-30 percent of the babies. Nurse Midwifery Educational Program graduated eight students in August, 1978. The program teaches medical students.

10. Voluntary Interruption of

Pregnancy Program became operational on August 15, 1971. Young W. Ahn arrived on July 1, 1973.

11. Grady, C.W. Long and Emory University Hospitals used for residency education, beginning 1975-1976, with Grady Hospital being the prime institution for student and residents education in Gyn-Ob.

12. Rape Crisis Center, initiated in 1974; administrative responsibility was transferred from the Dept. of Psychiatry to Dept. of Gyn-Ob in 1977-1978, sponsored by Malcom G. Freeman. Patient visits increased to 1,141 in 1979. Peggy Ziegler was appointed Director in 1979-1980.

13. Emory-Grady Teen Services Program — Marion Howard, Ph.D., began service in December, 1976 in regard to sociological factors related to teenage pregnancy.

14. Emory University Hospital canceled Obstetrical Service in 1982-1983. All obstetrical care provided at Grady and Crawford W. Long Hospitals.

15. First Annual W. Newton Long Lectureship held in 1982.

16. Te Linde's operative Gynecology, 6th edition, co-authored by John D. Thompson.

17. Medical students and residents achieve excellent scores on National Boards and in-service training examinations, 1986.

Grady Hospital is essential to the development of accredited residency teaching programs for the Morehouse School of Medicine in surgery, medicine, pediatrics, and obstetrics-gynecology.

18. In vitro fertility clinic operative at the Emory Clinic, 1987-1988.



Figure 9 — Ludie Andrews secured R.N. diploma status for colored nurses. (photo from *White Caps*, Grady Memorial Hospital School of Nursing, 1982).

19. Progress and strengthening continue in education, patient care and research, 1988, with other activities such as cytology; nurse-practitioners; physician assistants; laparoscopic voluntary sterilization training; Maternal and Fetal Health Assessment;²⁵ etc.

Medical Directors, Grady Memorial Hospital: Joseph Hines, M.D., 1932-1937; Julian Jarman, M.D., 1962-1965; Douglas B. Kendricks, M.D., 1967-1972; Asa G. Yancey, Sr., M.D., 1972-January 1, 1989; Hamilton E. Holmes, M.D., January 2, 1989-.

Superintendents; Executive Directors: Dr. Albert Frensch, first superintendent, June 2, 1892 -October 31, 1892; Tomlinson Fort Brewster, M.D., late 1892-1906; W.B. Summerall, Dr. R.A. Bartholomew, M.D., 1919; Mr. Steve Johnston, 1920-1931; Mr. John B. Franklin, 1931-1938; Joseph Hines, M.D., 1938-1939; J. Moss Bealor, M.D.,



Figure 10 — First building of the old Atlanta Medical College, 1856, which was razed in 1906.³ (photo from *The Emory Alumnus*, October, 1954).

1939-1943; Mr. Frank Wilson, Sr., 1943-1964; Mr. J.W. Pinkston, Jr. 1964-1989; Mr. Robert B. Johnson, 1989.

Chairmen³⁹ of Fulton-DeKalb Hospital Authority: Thomas K. Glenn, 1941-1946; Hughes Spalding Sr., 1946-1958; Fred J. Turner, 1959-1961; W.O. Duvall, 1962-1964; Edgar J. Forio, 1965-1968; Robert S. Regenstein, 1969-1983; Edward C. Loughlin, Jr., M.D., 1983-1991; Robert L. Brown, Jr., 1992.

One Last Look

Individuals who have spent several years at Grady Hospital usually have a never-to-be forgotten human interest story. Mine was, a frantic call was received from the nurse about 9:30 PM that a patient had jumped from the window of ward 400 A, which is five stories above the ground. Grady's first floor is one story above ground level. The nurse said that the patient was in good condition — having walked, unaided, around to the surgical emergency clinic. But "do come to 400 A to investigate the occurrence,"

she urged. I dashed madly to 400 A and saw the open window and pitch black darkness beneath. I was a little skeptical and the woman pa-

tient next to the window was asked if a man jumped out. She said, "yes." "Well, how do you know?" She replied, "I heard him yelling as he was going down." "Well, what did you do?" "I went to the bathroom." "Then what did you do?" "I told the nurse." Originally, the new Grady wards were not air-conditioned and the windows were covered by full-sized, about six feet high heavy duty aluminum screens. Early the next morning, the advantage of screened windows was obvious. The screen that he pushed out fell on top of sturdy six feet high burfordi holly shrubbery. The patient landed on the screen and squashed a six foot section of six foot high shrubbery to a height of one foot — got up and walked alone around the building to the surgical emergency clinic for care of his scratches and bruises.

As was stated at the opening ceremonies in 1892, Grady Hospital, quote, "will nurse the poor and rich alike and will be an asylum for black and white."



Figure 11 — Upper photograph: Grady Hospital, owned by the City of Atlanta; lower photograph: buildings acquired by Emory University in 1915, which marked the beginning of Emory University School of Medicine as it is known today (photographs from *Grady Annual Report for the calendar year 1936*).

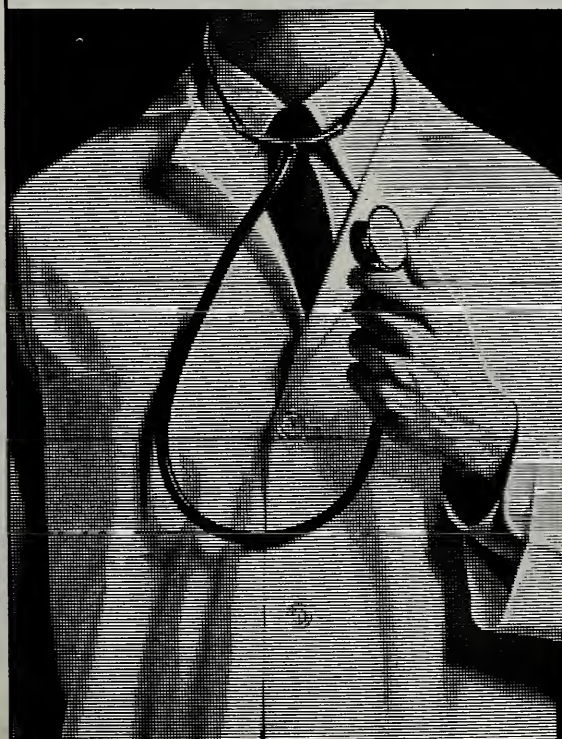
References

1. Harris JC. Life of Henry W. Grady including his writings and speeches. 1890;21-23;190.
2. Davis HE. Henry Grady's new south, Atlanta — a brave and beautiful city. 1990;134.
3. Davis MR. The Emory alumnus. October 1954. The Medical School Centennial Issue;9-21; Special Collections, Emory University, the Robert W. Woodruff Library.
4. Garrett FM. Atlanta and environs. 1954;Vol I;809;Vol II;257-260;809;170-171;204;950-951.
5. Brewster TF. Ninth annual report. Grady Memorial Hospital for year ending December 31, 1900;5;6;17;47-57.
6. Summerall WB. Nineteenth annual report. Grady Memorial Hospital for year ending December 15, 1910;4;8;64-83.
7. Pinkston JW, Grimsley J. Minutes, department heads meeting. September 14, 1989;2-4.
8. Martin Jr JD, Perdue GD. The history of surgery at Emory University. 1979;279-299.
9. Dixon BK. Fact sheet, researched for 80th anniversary of Grady School of Nursing. March 31, 1978;1-3.
10. Yancey Sr AG. Chapters 2 and 9 in A century of black surgeons, The U.S.A. experience by CH Organ Jr. 1987;Vol I;63;102;335-375.
11. Yancey Sr AG. Medical education in Atlanta and health care of black minority and low income people. J Nat Med Assoc. April 1988;Vol 80;No 4;467-476.
12. Pinkston Jr JW, Grimsley J. Minutes, Grady Memorial Hospital department heads meeting. October 12, 1989;5-9.

13. From the wooden stethoscope to the swan. Great Grady days. June 1-2, 1980. Annual report for Grady Hospital, year ending December 31, 1980. Special Collections Section, Emory University, Robert W. Woodruff Library.
14. A plush home for Grady. The Emory alumnus. April 1958;Vol 34;No 3;39-41.
15. Byrd CP. Publisher. Henry W. Grady and his speeches, with a short biographical sketch of his life. 1895;5-11.
16. Nixon RB. Henry W. Grady: spokesman of the new south. 1943.
17. Shurter ED. The complete orations and speeches of Henry W. Grady. Publisher Hinds, Noble and Eldredge. 1910.
18. Gay EW. The medical profession in Georgia. 1733-1983.
19. Tablet. Winter/Spring 1984;Vol 2;No 4. Morehouse School of Medicine.
20. Tablet. Spring 1985;Vol 3;No 2;5. Morehouse School of Medicine.
21. Dixon, BK. White Caps. Grady Memorial Hospital School of Nursing. 1982;82-90.
22. By the grace of Grady, 100 years of healing. Atlanta history, a journal of Georgia and the south. Vol XXXVI;No 1;Spring 1992;40-53.
23. Leigh, TE (guest editor for Emory centennial issue). Special Emory Section. J of Med Assoc of Ga. Centennial Emory University School of Medicine issue. September 1954;759-776.
24. Cater D. A history of Emory University School of Medicine. Special Files. Dept of Gyn-Ob Emory University School of Medicine at Grady Hospital;1-4.
25. Caton WL. (reports from 1953-1957). Cross

- JB. (reports from 1957-1961). Thompson JD. (reports from 1961-1986). Klein L. (reports from 1986-1992). Annual reports of department of Gynecology-Obstetrics to Emory University School of Medicine. 1956-1991.
26. Special Collections. Office of department of Gynecology-Obstetrics, Emory University School of Medicine at Grady Memorial Hospital.
27. Annual report, Grady Hospital, year ending December 31, 1933;3.
28. Brewster TF. Annual report, Grady Hospital, year ending December 31, 1905;9;49-51.
29. Verdery MJ. Memorial of Henry W. Grady. Harris JC. Life of Henry W. Grady including his writings and speeches. 1890;69-90. 1972;180-198.
30. The corner stone. The Atlanta Constitution. December 23, 1890.
31. The Grady Hospital. The Atlanta Constitution. May 24, 1892.
32. The Grady Hospital. The Atlanta Constitution. May 25, 1892.
33. Grady observer 75th anniversary. Southern hospitals. January 1968;9-14.
34. Loughlin Jr EC. The Fulton-DeKalb hospital authority 1991 Annual Report;2;3;10-15.
35. It's the city's now. The Atlanta Constitution. May 26, 1892.
36. Annual report Grady Hospital, year ending December 31, 1946.
37. Annual report Grady Hospital, year ending December 31, 1947.
38. Annual report Grady Hospital calendar year 1975;32.
39. Annual report Grady Hospital calendar year 1985.

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The Real Revolution in Medicine

Waddell Barnes, MD

SATCHEL PAIGE, one of the all time great baseball pitchers and Mark Twain's match as a homespun philosopher, once advised, "Don't look back, they may be gaining on you." As a general rule, this is superb guidance. Despite this counsel, I will present you with a medical practitioner's viewpoint of how we got where we are today and will suggest where we need to go from here. Such perspective is easy for the old, often because we older people still remember the swamp we wanted to drain before we ended up just fighting alligators.

I graduated from medical school in 1949. I will describe events since that time from the medical outlook, ending with a suggestion for your future.

With the end of World War II in 1945, a new age of medicine began. All elements of the medical care equation began to change — society, the physician, the family, and the patient.

Societal changes provided the energy for this transformation. Of course, we all know that these societal changes are due to increased

A medical practitioner's viewpoint of how we got where we are and where we need to go from here. Such perspective is easy for the old, often because we older people still remember the swamp we wanted to drain before we ended up just fighting the alligators.

knowledge, especially scientific, expanded urbanization with its close contact with other people and the easy exchange of views,

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This paper was delivered at the Waddell Barnes, MD, Annual Medicine Grand Rounds, April 24, 1992. The event was sponsored by Mercer University School of Medicine and by the Medical Center of Central Georgia.

the global village created by television and CNN, the constriction of each individual's personal space, and the interdependence of the individual members of society.

Political rule of any society naturally leads to more interest in the desires of those who vote and those who voice their opinions loudly than in the desires of those who do not vote, more interest in "group-think" than in individualism, with more interest in groups than in individuals. Loss of family orientation has led to the jealous assumption of the paternal role by the government.

With varied problems competing for attention, controversial priorities were set. Generally, each added societal interest spawns another bureaucracy, manned by people new to the field, often untutored, and unaware of their place in the history of the problem addressed. With limited resources, economics, rather than what is right or wrong, drives the decision making. There was, then, a built in conflict of interest.

In medicine, for example, there

was on the one hand a drive for expanded access of all the citizens to medical care; at the same time there was a drive to cut costs of medical care overall. The impossibility of solution to this problem was obvious unless the components of the equation were altered, such as by decreasing the services available to the patient or by increasing the amount of money spent for the totality of care.

The pall of government regulation has darkened the vision of physicians in carrying out their duties, with cries from physicians protesting the strait jacket of imposed uniformity in patient care.

It was and is this vocal, bitter battle over economics and priorities which has provided the headlines. The seizing of some of your traditional roles by the government in the name of cost cutting and expanded access has provided grist for the media mill, which amplified the cries of distress from both sides. The pall of government regulation has darkened the vision of physicians in carrying out their duties, with cries from physicians protesting the strait jacket of imposed uniformity in patient care.

True to the penchant in advertising to coin or to use emotionally meaningful words to obscure what is happening or to guide the path of future change, the revered "physician," a concept of beneficence and selflessness, has been changed to the sterile, if not pejorative, "health care provider" by those

who would change the system. This change in verbiage connotes commercialism, in common with used car salesmen and quack nostrum purveyors. Repeated often enough, the concept will take root and grow. Coined words, such as Medicare and Medicaid, have proven their worth in suggesting caring and aid, concepts with which few would disagree, but also selling the methods used along with the concepts as a single package. Words can be utilized to camouflage what is happening just as well as to clarify or to describe what is happening.

In the meantime, back at the ranch, your patients have not waited for your return from the wars in Washington without changes of their own. It is these changes that I would like to call to your attention, for here is the unheralded revolution in medicine.

While you have been off fighting for your professional life, mountebanks and salesmen have visited your home base frequently. Your patients have heard pitches of varying sorts which, in their feelings of abandonment, they have found persuasive. You have been described in less than flattering terms, indeed, in venal terms. Captious comments about physicians by anonymous bureaucrats have been a steady emanation from various sources, as though the bureaucrats themselves were running for office and had adopted the election year morality of our contemporary politicians.

The major damage to the doctor-patient relationship has not been the result of lack of caring physicians but rather has been the calculated and by some the desired result of biased and self-serving reporting by those in the business of government. While we have our physician miscreants, to be sure, I believe that the moral and ethical standards of physicians today are far above those of most of our ac-

cusers. Just survey the Washington scene today.

Let us trace the all too familiar chronology of our present circumstance.

In the past, the typical individual knew little of the universe of medical care. This universe was viewed as an arcane science, a direct descendant of the Eleusinian mysteries, interpretable only by the specially trained, who were depended upon to bring to bear that knowledge for the benefit of the sufferer. Trust pervaded the relationship. The care was rendered in the context of the family and of the community. Fees were tailored to the financial resources of the individual, with no fee for the indigent and an inflated fee for the wealthy. The concept of the distant government's having a role in the provision of health care was not yet born. The Constitution guaranteed to provide the environment for the exercise of life, liberty, and the pursuit of happiness, but this guarantee never was envisioned to include the provision of personal health care.

In the meantime, back at the ranch, your patients have not waited for your return from the wars in Washington without changes of their own.

The indigent or near indigent were treated in doctor's offices or in hospital clinics, usually by physicians in training or by local physicians who donated their time and effort with no thought of any payment from any source. In medical training, this was the format which ensured that everyone could receive treatment without personal

bankruptcy. One of the requirements of hospital staff membership at this hospital at that time was the donation of one half day a week to one of the clinics. A few physicians were chosen to make rounds on the wards with housestaff, caring for the in-patients. We felt honored to be chosen for that task, believing it to be a form of peer recognition of our abilities and of our knowledge of the contemporary medical information base.

Two events seem to have prepared the social milieu for changes in the philosophy of the purposes of government. One, the great depression of the thirties demonstrated the economic interdependence of all of us. No person, no matter how individualistic he was, was unscathed by the unraveling of the economy. Control of the dispensing of money by the federal government led to increasing control of the recipients of that largess. It is not unreasonable to suggest that all citizens then began to look to the state for money for an expanded menu of social needs over time. Gradually, we expected more and more benefits from Uncle Sam. The second event was World War II, mixing our population to prepare for the chemistry of today.

The major damage to the doctor-patient relationship has not been the result of lack of caring physicians but rather has been the calculated and...self-serving reporting by those in government.

Then, in 1948, President Truman declared that health care was a right of all citizens, a philosophic stance that was remarkable in its

day because virtually nothing in the way of planning or funding accompanied this pronouncement of a major change in social policy. I believe that significant changes in the doctor-patient relationship began at this point.

Folklore has it that in the "good old days," the physician was always a saintly surrogate family member who brought the offerings of the science of medicine plus the art of medicine to the patient in a wise, caring, empathetic way. This image still is the template against which many measure the performance of their personal physician and is the standard which many physicians strive to meet.

As an extension of the longing for that mythical physician, the public has been convinced that the root cause of this change in physician behavior lies in the way physicians are trained. Conventional medical schools are said to place science above humanity in their instructional program, with the implied result that heartless scientists are graduated, rather than beneficent old-time physicians with a modern medical armamentarium.

This reasoning is flawed, because the world in which the old time doctor practiced is no more. Physicians are part of their contemporary society, having the same values shared by others in the society. An anachronism rarely survives long.

In the modern world, individualism is extolled and close relationships with others are rare. Success in the work ethic is measured almost solely by the financial statement of the individual. "If he's so smart, why isn't he rich?" sums up the shallow assessment of a person. Greed is prevalent and praised, and genuine dedication to the good of society over personal aggrandizement is uncommon.

Yet we ask young physicians to go to the hinterlands, to forego the advantages of urban life and of fi-

nancial well-being for themselves and their families to benefit patients who are in need of medical care, but who cannot afford it. We, the public, are not willing to help these same potential patients with their other comparative deficits, such as by providing better schools, better job opportunities, and better roads, but we blame the medical school and the student for not providing this better doctor for this spartan environment.

Two events seem to have prepared the social milieu for changes in the philosophy of the purposes of government: the Great Depression and World War II.

Individualism in the health care domain is evident in the recent passage of the Patient Self Determination Act, which was literally sandwiched in the middle of the Omnibus Budget Reconciliation Act of 1990. Emblematic of its basic *raison d'être* is the location of this bill in the legislative output of the year. This Self Determination Act was passed not because it was right and good, which I believe that it is, but rather because it was needed economically. Implementation of its provisions probably would save money, especially in the use of medical resources during the resource taxing terminal illness of the individual.

A more laudable instance of that individualism is exemplified by the relatively new organization, Planetree. This organization was founded in 1978 by an individual who had had some frustrating expe-

riences as a patient, the origins of which lay in the impersonality of hospital residence and in the failure of her physicians to explain her plight in terms understandable to her. In 1981, she opened the Planetree Health Resource Center, with over 2000 books, a clipping file on current medical research and a catalogue of referral groups and agencies. The purpose is to educate the patient to make treatment decisions in concert with the physician. An in-patient demonstration ward has been established in the Pacific Presbyterian Medical Center in San Francisco with the avowed goal of making patients partners in their medical treatment decisions. The concept has proven so popular that similar facilities are opening in other major cities.

Individualism has its price. This price is evident in part by the number of health care decisions the patient is asked to make from among many choices. Look at the multitude of personal decisions you ask your patient to make. The decision to enter the hospital, some of the treatment decisions, the choices mandated by the Self Determination Act with its living will or its durable power of attorney, and appropriate home health care providers after mandatory dismissal from the hospital (in this area alone, there are four such agencies, as well as meals on wheels, home medical equipment with its 15 providers, 9 companies providing oxygen and respiratory equipment, 6 companies providing nutritional support, pain management, i. v. antibiotics and chemotherapy, and either the Bibb County or Houston County Hospices) stand out as routine important decisions.

Who, then, is this contemporary patient of whom you ask so much?

In your office, s/he arrives worried, uncertain about you and your motives, your true interest in them

as a person, your reliability, your training, your cost, and indeed your basic honesty. S/he has heard that you spend little time with your patients, you cheat in your charges, you are interested only in your income and your time off call, and you sleep around with your patients. Personally, you own vital medical technology, which s/he reads that you use indiscriminately for your private gain. Scarcely a general interest magazine fails to have some lurid article about your fellow professionals, front pages find you riveting, and the nightly news uses medical sophisters as fillers of time slots when genuine news is scarce. Your friendly bureaucrats in Medicare and Medicaid serve you by disseminating medical misinformation and slanted, often leaked stories, building their own image as watchdog and yours as a dog to be watched.

In the hospital, an intrinsically strange and often hostile environment, your patient is even more insecure.

By educational standards, you are a special person; society needs you in order to flourish. But you are a human being before you are a physician.

So what is the answer to the present importunate chaos? Certainly not just superficial public relations, with its atticisms, repetitive commercials on TV, planted news stories, and *parlous bon mots*.

Paraphrasing an often quoted Shakespearian declaration is apt. "The solution, dear Brutus, lies not in our stars, but in ourselves." You are the answer. The Kantian categorical imperative must be your own credo, your medical impera-

tive. The public is watching you. You must pattern your own behavior by those axioms that you believe should apply to all people. By educational standards, you are a special person; society needs you in order to flourish. But you are a human being before you are a physician. The standards of exemplary conduct apply to you as well as to others.

In the pervasive mistrust of today's Zeitgeist, precipitated in large part by the perversity of our government, you are being watched by your community in order to judge whether you are living up to your guardianship. The public expects you to show a dedication to your patients, honesty in your statements and in your actions, moderation in all your behavior, including your charges for your services, humility and courtesy in your interactions, and a true concern for the public good over your own.

As evidenced by the public response to the special perquisites that were enjoyed by Congress, the citizenry is sensitive to any suggestion of arrogance and greed on the part of public servants. You are a public servant. Generations of physicians who preceded you have built that image by selfless service and dedicated work. It is largely on the foundation provided by them that you have the bountiful future inherent in earning the Doctor of Medicine degree, but each generation of physicians has the responsibility to pass on to the next generation an unblemished reputation of his profession.

Each day, ask yourself, "Have I kept the faith?"

Thank you for letting me say to you something that has been on my mind for a long time. Our society is evolving, and we must change the mechanics of the delivery of medical care. But we must not change our values, our ideals, our dedication, and our lofty personal standards.

Bruxism, Neck Pain, and A History of Child Sexual Abuse

Alfred A. Messer, MD

WHAT IS THE FIRST memory you have in your life? The very first memory? It may be totally innocuous, like playing in a sandbox, or a relative visiting, or it may be a traumatic memory like an injury.

Every psychoanalyst asks that same question of a patient. Frequently, the first memory is like a radar vector honing in on a problem that has existed for a lifetime. An adult who suffers from panic attacks and fear of loss of control might remember that on their fourth birthday they were taken to an amusement park and got separated from their parents. The child remembers the fright and the fear of being alone and abandoned. Or, a young boy remembers a baseball game and how he struck out with the bases loaded.

Sally became flushed and embarrassed when she was asked about her first memory. She wiped her brow, her face grimaced, her teeth clenched, and she swallowed several times. With encouragement, she said softly: "I was about 5 years old when I awakened with

Bruxism — the grinding or clenching of teeth — can become pathologic in the abused child and lead to significant mouth or jaw problems later in life.

my stepfather crouching over me with his penis in my mouth." What an overwhelming memory! Can you imagine her reaction as she tried to go back to sleep? Did she clench her teeth? What about the next night? Could this first memory be related to severe bruxism and to temporomandibular problems later in life? I will detail Sally's story presently.

Reports of child sexual abuse or child molestation seem to have descended upon us like an avalanche. My thesis in this paper is

that bruxism — the grinding or clenching of teeth — which occurs commonly as a normative part of growth and development, can become pathologic in the abused child and lead to significant mouth or jaw problems later in life. The pediatrician or dentist may be the first health professional to become aware of the problem.

No precise figures are available as to the incidence today of child sexual abuse. In reviewing the scientific literature over the last 30 years, I was struck with how rare these reports existed decades ago. Today, there are journals whose main focus is dealing with child sexual abuse. Court calendars are jammed with cases of alleged abuse.

It is interesting that our Symposium occurs almost a hundred years after Sigmund Freud presented his paper, "The Aetiology of Hysteria," April 21, 1896. Freud suggested to colleagues that mental illness was the result of childhood sexual abuse. He minced no words, talking about assault, rape, and at-

Dr. Messer practices psychoanalysis. This paper was presented at the 1992 Thomas P. Hinman Dental Meeting in Atlanta. Send reprint requests to Dr. Messer at 3332 Valley Rd., Atlanta, GA 30305.

tack. He based his conclusions on patient reports, both males and females, who told him of being seduced, often by their fathers or other adults. Indeed, Freud had written to his colleague, Wilhelm Fliess, "My own father was one of these perverts and is responsible for the hysteria of my brother and my younger sisters."

You can imagine the impact of this paper in Victorian Vienna. Freud was universally denounced. Who could imagine this happening, "Vati" or "Mutti" or "Onkel Georg" victimizing a child? Freud later modified his seduction hypothesis, and said that the events reported were fantasies and fabrications rather than truths. Dr. Jeffrey Moussaieff Masson has harshly criticized Freud's retraction, describing Freud as a man who lost his courage and consequently caused damage to many patients over the generations.¹

The difference between the Seduction Theory and the Oedipal Theory is important. In the Oedipal Theory, based on the Greek myth, the young boy wishes to possess his mother and exclude his father. (The female counterpart is the Electra Complex in which the little girl sees mother as her rival for exclusive possession of her father.)

In the Seduction Theory, the belief was that actual child abuse by an adult can be the primary cause of mental illness. The Oedipal Theory states that actual abuse probably never happens, that the memories are fantasies. Neurosis results from the child's desire to possess the parent and do away with the rival. The desire and yearning produced enormous guilt and conflict and that caused a lifetime of mental problems.

Today, we listen carefully to our patient's description of interactions and feeling with adults, and we are not as prone to lump them in to the category of fantasy or wishes. We recognize that actual childhood abuse occurs, not only rape, oral

sodomy or anal sodomy, but voyeurism, exhibitionism, and masturbation. Sometimes, animals are involved, particularly where satanic cults exist. There may or may not be penetration. There may or may not be violence. (The background of many patients with multiple personality disorder is early and repetitive abuse of any kind, in which they felt helpless to countermand the abuse.)

In 1977, Dr. Diana Russell in California took sexual histories from 930 women. Thirty-eight percent said they had been abused by the age of 18. Of the 38% who had been abused, 89% said the abusers were family members or acquaintances. From current court and clinical observations, the incidence of sexual abuse by adults of girls before age 18 may be one in six, boys, one in 15. These figures are tentative because of false allegations about sexual abuse which I will describe later, but we are dealing with a public health problem of major magnitude.

Symbolism of Teeth and Jaw

When we concentrate heavily in an area, we "sink our teeth" into the subject; a particularly pungent remark is a "biting comment." These references remind us of the power of teeth and jaws. The first strength a child feels is when a tooth erupts. The infant might purposefully bite the mother's nipple to show his power. Later on, there is a preoccupation with biting and chewing. Indeed, I hope you are "chewing over" what I am saying. How does a 3-year-old express tension or frustration? By clenching his teeth, and don't we refer to adults who are troubled or facing hardship as "gritting their teeth"? The German word for biting is "beissen." The man or woman who walks about morose and glum, teeth clenched, is often referred to as a "Verbissener," literally, "bitten in." Psychoanalytic patients often dream of losing teeth when they

have been through some humiliating episode. Prosthodontists know how depressed patients become when all the teeth are pulled.

In the very young child, bruxism may occur for no apparent reason, especially during sleep. During daytime activity, there may be playful bruxing. Bruxism may occur also occasionally during the time of mixed dentition, 6-13 years, without significant damage to the teeth. Tension or frustration is relieved, the same as would be flexing an arm or making a fist or juggling a leg.

Upper and lower teeth are not in contact in the ordinary physiologic state, the resting state, except for chewing or swallowing. Thus, the child or adolescent or adult who constantly clench their teeth may be expressing fear or rage or guilt and can do severe damage to their mouths and jaws.

With bruxism, the temporalis, masseter, internal and external pterygoids, inframandibular, and digastric muscles are contracted. Grinding of teeth, when done during sleep is more pathologic than during daytime purposeful clenching, as for example when lifting weights or engaged in a hostile confrontation. In ordinary life span, the incisoral surface of teeth wears anteriorly and posteriorly. The curve of Spee is intact. With bruxism, and pronounced side-to-side motion, the lateral surfaces are worn and the person attempts to compensate by putting the muscles mentioned under further tension. Is it then a fair speculation to assume that bruxism and its sequel are central elements in the development of temporomandibular problems, and from that, recurring head, neck, and shoulder pain? In animal studies, we know that many species clench their teeth when they are apprehensive. Even elephants grind their teeth. Postmortem studies show that elephants in captivity have more tooth pathology than do elephants in the wild.

Clinical Case

Now back to the story of Sally, and my thesis that with rampant sexual abuse, health professionals must be alert to this trauma as a source of bruxism, temporomandibular problems, or even patients who are obsessed about their teeth and jaw. There can be unending search for solution by going from dentist to dentist, physician to physician.

Sally, 33, plump and red-haired, was referred for treatment because of chronic depression. In addition, she had disabling neck pains, constant headaches, occasional neurodermatitis, and inability to work in her job as a computer programmer. She was divorced and lived with her 13-year-old daughter.

During one session, Sally remarked that her daughter would sometimes come into her room and awaken her because the grinding of Sally's teeth was so loud that it awakened the household; in fact, she had mouth guards that she wore sometimes at night. When I asked her about temporomandibular problems, she said, "I've had more splints than you can count." Sally had also suffered from eating disorders since she was a child, ballooning up and slimming down.

Sally's life story was that her father was killed during war combat. She was an only child, 2 years old. Her mother remarried in a year, and Sally recalled that her stepfather constantly referred to her as his little angel, his special gift. There were always special hugs between stepfather and herself. When she went to bed, he would embrace her fervently, then listen to her prayers, then both mother and father would kiss her good-night. Only after therapy was in progress did she recall that he would sometimes return and lie in bed next to her. Sometimes he would lie under the covers with her and embrace her tightly. She felt a

great deal of affection for this man. On one particular night, she awakened to find her stepfather hunched over her on his knees with his penis in her mouth. She began screaming. The stepfather picked her up and comforted her. She recalled her mother coming into the room. Gradually she went to sleep. Thereafter, she remembered that there were times when she would hold onto her stepfather even more tightly and other times she would push him away and insist she wished no physical contact with him. The stepfather was a preacher, and Sally attended services faithfully every Sunday. When she was 9, she refused to go, and there were battles every Sunday about her nonattendance. The eating disorder began about that time.

Nothing was ever said of this incident. However, Sally gradually withdrew from her stepfather. She recalled being very sensuous and would rub up against boys and girls. Her first sexual encounter was at 11 with an older boy. It was painful. Then she began many sexual encounters with boys of all ages. For periods of time, she would cease all sex.

The home was not a happy one, and much to the parents consternation, Sally eloped when she was 16. Her husband worked in a mill. Sally finished high school, but when she became pregnant, she stopped working. The marriage was of two adolescents and eventually there was a divorce. Sally married a second time to a man 12 years her senior. She was struck by his kindness and by the fact that he made few sexual demands on her. Her own sexual needs were satisfied when she performed oral sex on him.

After two years of marriage, Sally learned with some bitterness that her husband was a homosexual who married her because he wanted to maintain an image in his community. She immediately sued for divorce. Following her divorce, she had a number of relationships

with men, usually avoiding sex. She remarked that she could never predict her own responses sexually. Sometimes she would feel an intense urge for sexual contact and other times she withdrew completely. Rarely could she have a sexual climax.

Consequences of Abuse

Our concern with molestation and abuse is that this early stimulation interferes with the healthy progression of sexual development and curiosity. Much depends on the age of the child. Very young children who are molested repeatedly during early life tend to be sulen and withdrawn. Other children begin rampant sexual careers early in life. The earlier that sexual abuse is recognized in a patient, the more efficacious is therapy.

In this paper, I deal mainly with the victims of childhood sexual abuse, because as health professionals, we stand at the front line of identifying and perhaps treating patients who are exposed to this difficulty. However, we should note that in studies of biologic fathers who sexually abuse their daughters, and break the incest barrier, there are several personality types. One group are men who themselves were sexually abused as children and unconsciously may be attempting either to resolve this old wound, or by abusing children, "get even" with a person for this past wound. Other men are consciously preoccupied with sex and evidence interest in their daughters practically from birth. Another group become attracted to an adolescent daughter, a nubile child, who reawakens adolescent fantasies and these fantasies are then acted upon. Another group of men are emotionally hungry and lonely and seek total fulfillment from their children.

Fifty percent of all marriages entered into currently will end up in divorce. When there are children

in the first union, and then remarriage, there is no blood-tie between the child and the stepparent. The force of the incest taboo is weakened. I recently treated a family in which a boy of 14 was a runaway. He had been arrested for vandalism. His own mother had abandoned the family to live in a cult community. The father remarried. During a number of family sessions, it was evident that there was an intense attraction between this young, handsome, athletic boy and his young, vivacious stepmother. The story is similar to that of Phaedra. Phaedra was a vibrant Greek woman, who married King Theseus and fell in love with his son of a previous marriage, Hippolytus. As happens in Greek tragedies, all three came to a bitter end. This subject is also dealt with in the contemporary play by Eugene O'Neill, "Desire Under the Elms."

False Allegations

In Dr. Arthur H. Green's pioneering study of this phenomenon, he found 55 percent of allegations of sexual abuse during custody battles were false.² One parent who wants to maintain custody can literally brainwash a child into describing touching or fondling which can be then extended to convince judges and juries that sexual abuse has taken place. A divorced father, who cares for his 4-year-old daughter every other weekend, and bathes her, can be a likely target for charges of sexual abuse.

Sometimes the allegations are made out of vengefulness. A boy of 11 accused the stepfather of fondling his genitalia. The stepfather was a rigid disciplinarian whom the boy detested. The stepfather also traveled periodically, and during the days when he was away, the boy slept with his mother. Can you see an easy way to get the stepparent out of the house? Accuse him of sexual molestation.

Now let us visit the practitioner's office.

Suppose you are treating a child or an adolescent and your concern is that they are being sexually abused. (Concrete *evidence* of sexual abuse *must* be reported to the authorities.) Do not ask a direct question! Your practice would not be enhanced if a youngster mentioned to a parent or a guilty adult that evening, "Guess what Dr. X asked me today?". Rather, the first thing we watch for are changes in behavior. I've already alluded to eating disorders. The child may begin acting withdrawn and depressed, or conversely, very clingy. Depending on the age, there can be a return to bed-wetting and nightmares. There can be an intense interest in sex due to overstimulation, be it with siblings or playmates or pets. Schoolwork may drop off.

In these situations, the professional makes careful notes of his or her observations and then mentions the behavior to the parent. It is done in an informational way, asking questions such as, "I've noticed that Mary seems depressed and is having some eating troubles. Could there be any source of difficulty in the family?" A witness should be present. If necessary, the entire family is called in. If you are still not satisfied, keep talking. The term "overstimulation" is usually sufficient to evoke a telling response in circumstances where sexual abuse is occurring. Eventually, you might get them to a psychiatrist and save a patient from lifelong pain and frustration.

References

1. Masson JM. The Assault on Truth. 1984; Farrar, Strauss, Giroux.
2. Green AH. True and false allegations of sexual abuse in child custody cases. J Am Acad Child Psych 1986;25(4):449-456.

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Atlanta Medical Associates	643
Auxiliary to the Medical Association of Georgia	594
Blue Cross/Blue Shield	590
Classified Advertisements	643
CompHealth	613
Health Quip, Inc.	640
Intrav 1993 Travel Programs	632
Knoll Pharmaceuticals	620A-B
Lilly, Eli & Company	589
MAG Leadership Conference	596
MAG Mutual Insurance Company	592
Mississippi Methodist Rehabilitation Center	588
Palisades Pharmaceuticals, Inc	610
Paine Webber	645
Searle, G. D., Inc.	646
Trupp Hoddnett Enterprises	610
U.S. Air Force	614
U.S. Army Active	631
Walton Rehabilitation Hospital	597

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Sorter NA, Wasserman SI, Austen KF.
Cold urticaria release into circulation of
histamine and eosinophil chemotactic
factor of anaphylaxis during cold chal-
lenge. *N Engl J Med* 1976;294:687-90.

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*From humors in the air of Fall
Come generations of recall,
To old dog Posh to grow more hair
To me exquisitely aware
Of stirrings basic yet obscure
Once necessary to endure
The barren Winter, manifest
Now by diffuse intense unrest,
Part longing and in part desire
To energetically acquire
To secret niche, to settle down,
To wait for Spring while winter-bound*

Day Birth

*The bottomless black void of night
Loses death in early light
As dimensions diminish and shallowness slowly
supervenes
And pastels of early sunrise in swaths and
skeins
Are painted with broad brush applies
On flat surfaces of eastern skies
Which first faint lit with opalescence
Progress to hues now sanguinescent
The stillness of darkness is broken by rustling in
first dawn gray
As life is instilled in the hush, and the new born
day
Gives earth its first faint new-
born cries
That issue forth to echo from flat painted skies.*

Blackberry Winter

*You toyed with me with golden days
Of daffodils and sunshine rays
Till ice within my soul and bones
Began to thaw with muscle tones
That long to chip at garden weeds
And look at catalogues of seeds,
While all the time how well you knew,
And time again has told me too,
That cold returns and I must wait
And think of warmth and ruminate.*

*I don't expect you to relent
Conceived in your obscure intent,
Wanton maiden warm and bold
Turned to cranky woman old
Mother Nature, quite capricious,
Meretricious, soon delicious.*

By John P. Wilson, Atlanta general surgeon.

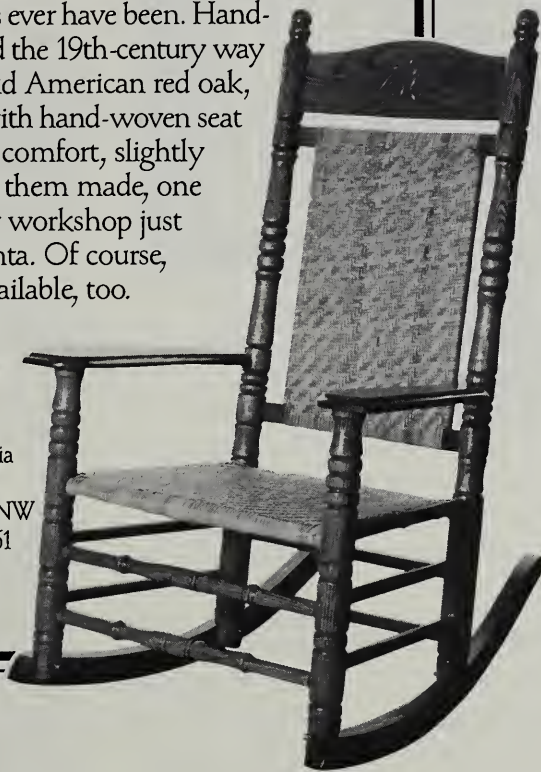
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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon[®] is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

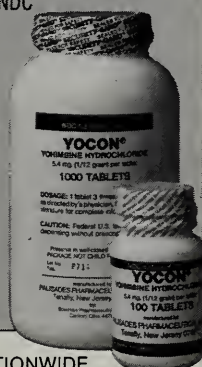
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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18-22 — *Sarasota, FL — Hyatt Hotel: Risk Management: Preventive Medicine for the Practitioner.* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc., PH: 813-388-1766.

25-29 — *Sarasota, FL — Hyatt Hotel: Issues in Family Practice Medicine.* (8:00 a.m.-Noon). Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

29-31 — *Buena Vista Palace, Walt Disney World Resort, Orlando, FL: Twelfth Annual Perspectives on New Diagnostic and Therapeutics Techniques in Clinical Cardiology.* Category 1 credit 12.5. Contact Registration Secretary, Extramural Programs Dept., American College of Cardiology, 9111 Old Georgetown Rd., Bethesda, MD 20814-1699. PH: 800-257-4739 (outside the U.S. and Canada), 301-897-2695, FAX 301-897-9745.

FEBRUARY 1993

1-3 — *Snowshoe, West Virginia — Mountain Lodge Conference Center: Cardiovascular Conference.* Category 1 credits 13.5. Sponsored by the American College of Cardiology, 9111 Old Georgetown Rd., Bethesda, MD 20814-1699. PH: 800-257-4739 (outside the U.S. and Canada); 301-897-2695; FAX 301-897-9745.

1-5 — *Sarasota, FL — Hyatt Hotel: Orthopaedics for the Practitioner and EM.* (8:00 a.m.-Noon) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American

Medical Seminars, Inc. PH: 813-388-1766.

8-12 — *Sarasota, FL — Hyatt Hotel: Geriatric Issues in Primary Care.* (8:00 a.m.-Noon) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

15-19 — *Sarasota, FL — Hyatt Hotel. Selected Topics in Contemporary Medicine.* (8:00 a.m.-Noon) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc., PH: 813-388-1766.

19 — *Augusta: The Impact of Chronic Illness on Children and Families.* Category 1 credit 6. Medical College of Georgia, School of Medicine. Contact Katrinka J. Akesson. PH: 800-221-6437 or 706-721-3967.

22-26 — *Sarasota, FL — Hyatt Hotel: A Practical Approach to the Evaluation and Differential Dx. of Common Neurological Complaints.* (8:00 a.m.-Noon) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

22-27 — *Augusta: 28th Annual Primary Care and Family Practice Symposium.* Category 1 credit 52. Medical College of Georgia, School of Medicine. Contact Katrinka J. Akesson. PH: 800-221-6437 or 706-721-3967.

26-27 — *Augusta: Flexible Fiberoptic Sigmoidoscopy.* Category 1 credit 14. Medical College of Georgia, School of Medicine. Contact Katrinka J. Akesson. PH: 800-221-6437 or 706-721-3967.

26-28 — *Sea Island: Georgia Society of Anesthesiologists.* Category 1 credit 7.75. Medical College of Georgia, School of Medicine. Contact Katrinka J. Akesson. PH: 800-221-6437 or 706-721-3967.

MARCH 1993

1-5 — *Sarasota, FL — Hyatt Hotel: Acute Care Topics in Emergency Medicine.* (8:00 a.m.-Noon) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

5-7 — *Atlanta — JW Marriott Hotel. Fourth Annual Southeastern Regional Conference on Multiple Personality and Dissociation—Advances in Understanding, Diagnosis and Treatment.* Category 1 credit. Sponsored by Ridgeview Institute. Contact Beth A. Gault. PH: 404-434-4568, ext. 3006 or 800-345-9775.

8-12 — *Sarasota, FL — Hyatt Hotel: Selected Topics in Gastroenterology for the Practitioner.* (8:00 a.m.-Noon) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

15-18 — *Sarasota, FL — Hyatt Hotel: Infectious Diseases Update.* (8:00 a.m.-1:00 p.m.) Category 1 credit 20. American Medical Seminars, Inc., and Temple University School of Medicine. Contact Dagmar Pierce, American Medical Seminars, Inc. PH: 813-388-1766.

17-20 — *Puerto Vallarta, Mexico — Marriott Casa Magna Hotel: Controversies in Women's Health Care.* Category 1 credit 19. Second Annual Scott and White/Texas A&M University. Contact: Susan Hughes, Office of Continuing Medical Education. PH: 817-774-4083.

Of Who We Are

Charles R. Underwood, MD

Casey at the Bat A Ballad of the Republic, Sung in the Year 1888

The outlook wasn't brilliant for the Mudville nine that day,
The score stood four to two with but one inning more to play.
And then when Cooney died at first, and Barrows did the same,
A sickly silence fell upon the patrons of the game.

A straggling few got up to go in deep despair. The rest
Clung to the hope which springs eternal in the human breast;
They thought if only Casey could get a whack at that —
We'd put up even money now with Casey at the bat.

But Flynn preceded Casey, as did also Jimmy Blake,
And the former was a lulu and the latter was a cake,
So upon that stricken multitude grim melancholy sat,
For there seemed but little chance of Casey's getting to the bat.

But Flynn let drive a single, to the wonderment of all,
And Blake, the much despised, tore the cover off the ball;
And when the dust had lifted, and the men saw what had occurred,
There was Johnnie safe at second and Flynn a-hugging third.

Then from 5,000 throats and more there rose a lusty yell;
It rumbled through the valley, it rattled in the dell;
It knocked upon the mountain and recoiled upon the flat,
For Casey, mighty Casey, was advancing to the bat.

There was ease in Casey's manner as he stepped into his place;
There was pride in Casey's bearing and a smile on Casey's face.
And when, responding to the cheers, he lightly doffed his hat,
No stranger in the crowd could doubt 'twas Casey at the bat.

Ten thousand eyes were on him as he rubbed his hands with dirt;
Five thousand tongues applauded when he wiped them on his shirt.
Then while the writhing pitcher ground the ball into his hip,
Defiance gleamed in Casey's eye, a sneer curled Casey's lip.

And now the leather-covered sphere came hurtling through the air,
And Casey stood a-watching it in haughty grandeur there.
Close by the sturdy batsman the ball unheeded sped —
"That ain't my style," said Casey. "Strike one," the umpire said.

*From the benches, black with people, there went up a muffled roar,
Like the beating of the storm-waves on a stern and distant shore.
"Kill him! Kill the umpire!" shouted some one on the stand;
And it's likely they'd have killed him had not Casey raised his hand.*

*With a smile of Christian charity great Casey's visage shone;
He stilled the rising tumult; he bade the game go on;
He signaled to the pitcher, and once more the spheroid flew;
But Casey still ignored it, and the umpire said, "Strike two."*

*"Fraud!" cried the maddened thousands, and echo answered fraud;
But one scornful look from Casey and the audience was awed.
They saw his face grow stern and cold, they saw his muscles strain,
And they knew that Casey wouldn't let that ball go by again.*

*The sneer is gone from Casey's lip, his teeth are clenched in hate;
He pounds with cruel violence his bat upon the plate.
And now the pitcher holds the ball, and now he lets it go,
And now the air is shattered by the force of Casey's blow.*

*Oh, somewhere in this favored land the sun is shining bright;
The band is playing somewhere, and somewhere hearts are light,
And somewhere men are laughing, and somewhere children shout;
But there is no joy in Mudville — mighty Casey has struck out.*

ERNEST LAWRENCE THAYER

*No mand is an Iland, intire of its selfe; every man is a peece of the Continent,
a part of the maine; if a Clod bee washed away by the Sea, Europe is the
lesse, as well as if a Promontorie were, as well as if a Mannor of thy friends
or thine owne were; any man's death diminishes me, because I am involved
in Mankinde; And therefore never send to know for whom the bell tolls; It
tolls for thee.*

Devotions, JOHN DONNE, 1573-1631

IT BEGAN at an innocent lunch with friends. The self inspection, the introspective look inward began there. We were, the three of us, in the hospital lunch room. No "two-martini lunch" at the Ritz, this gathering of surgeon, neurosurgeon, and psychiatrist. In the midst of the rush of a medical or surgical practice, one often finds lunch itself difficult enough to arrange and the two-martini one little more than an anachronism of the Nixon administration when it seemed to create the most discussion perhaps because of Democratic witch-hunting. But, there sat the three of us, en-

snared within the institution. No Ritz, no martini. Beyond these a psychiatrist for conversation and as usual, in my eyes at least, he looking below the surface of our composure and our talk for the fracture and stress-lines of our personalities. I vowed silently to myself, "You shall not find such in me today."

There we sat over lunch searching for conversation. Why we simply must talk, and especially when dining is beyond me. It seems enough to care for the task at hand. But quietness seems uncomfortable for us. We must talk. I once knew two physicians who had per-

fectured the art of the silent conversational encounter. They seldom talked meaninglessly to others or to themselves. I passed the two of them one day standing aface of each other in the hospital corridor. Both speechless. Staring into space or at the floor. I said to myself as I passed them, "I do believe those are the only two people in this entire world who can stand together for thirty minutes, neither say a word, and both leave satisfied with the encounter."

But back to the neurosurgeon and the psychiatrist. "What do you think," I said, for the quietness was

annoying and the psychiatrist was focusing upon me, "What allowed Ron Gant to relax last night and hit the Grand Slam when for the past month he has seemed so tenuous and ineffective? So unsure of himself?" Well, that did it. We were off down the conversational waterslide.

"A simple case of performance anxiety," the psychiatrist retorted quickly. "We all have it you must admit."

I felt a cold chill sweep over me. "And yesterday's gastrectomy. Was 'performance anxiety' there too?" I thought to myself.

"Fast ball hung on the outside of the plate," said the neurosurgeon.

"Perhaps so," I said, "but does it explain also the need for John Smoltz to retire to the locker room for a session with his psychologist when things are not going well?"

"A clear example," responded the psychiatrist.

"Performance anxiety" or not, we had won the game, and I searched for other venues of conversation. "Let me ask the question in a slightly different, and suggestive, manner. Did his rearing, his environment, have anything to do with the Grand Slam?" I suspected that this would grab the psychiatrist right down to his analytical shoes, that my own mother's admonition that I could become anything I wished, and for which I tried hard enough, had led to a certain amount of uncomfortable pressure

upon me. Had something such as this, I pondered, produced the 'performance anxiety' for Ron Gant and John Smoltz of which we spoke?

It seemed clear to me that in the far distant past of these two professional baseball giants, there resided an event of some type which melded with other formative forces of their maturing years, had cultivated an attitude — an action-potential — which itself culminated in their specific performance at a precise point in time. I am told that with a "fast ball" hurtling at 96 miles per hour toward a Ron Gant crouched tensely at home plate, there is a split second when the ball is midway from pitching mound to home plate when the decision to swing, or not, must be made. Whether or not it "hangs on the outside of the plate" — or "sinks." It is at this precise time in the lives of us all that we must know ourselves. No time then to engage in an evaluation of our beliefs — our loves and hates — our courage. Surely it is that looking honestly at our past thoughts and actions is not always a pleasant activity and yet to do so leads one to that comfortable place where we can function and perform without destructive self-doubt.

It is over now. Lunch and conversation both behind us. Also gone is the "Series." No worry tomorrow of performance or anxiety. Only the long winter and yet the comfort that "the rapture of pursuing is the prize

the vanquished gain." This and the consolation that Spring and a New Year and new "Training" lie ahead.

So it is that our past failures, our accomplishments, our strenuous efforts to excel must be put behind us, and our thoughts, our performance, and our anxiety, renewed for yet another run at this oncoming year. Christmas lies before us be we Christian, Jew, or of other persuasion. Beyond this, the "New" Year with all its mystery. With all of its excitement and unpredictability. With all of its performance anxiety. Who indeed among us can avoid the glorious exhilaration, the mere thought of getting on with it. There is a 98 miles per hour "fast ball" hurtling toward us. Written on its cover is not only "Wilson," but other symbols such as "HMO," "PPO," and "HPO." It is halfway to home plate. We have a split second to decide to swing. Or, to watch it go by. Spring Training is over. The Game has begun. Performance anxiety threatens us. All this, and yet for a few moments the "Joyous holiday season" beckons. Seductively invites us to sit quietly, reflect, with reason as to who we as physicians really are. Why we became such, and what we wish to become. Beckons us to redefine our mission and our goals.

To you all —

"A Joyous and Happy and Merry
Christmas

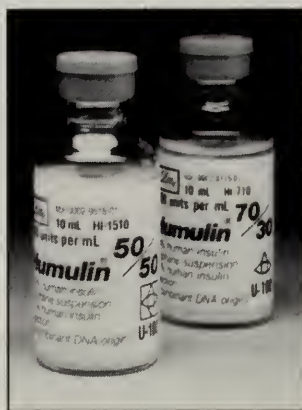
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Are You Liable for the Medical Malpractice of Your Co-Owners?

Robert N. Berg

YOU AND A COLLEAGUE are co-owners of a thriving medical practice. While you are out-of-state attending a continuing medical education program, your colleague misdiagnoses a patient, who suffers serious adverse consequences. One year later, a multi-million dollar lawsuit is filed, naming as Defendants your ownership entity, your colleague, and you. Visibly upset, you bring the lawsuit to your attorney and ask, "how can I be held liable for the professional malpractice of someone else? I was not even in the State when the alleged malpractice occurred!" Your lawyer explains that the issue of derivative liability for professional malpractice is a complicated one. He also suggests that the question of whether or not you can be held liable will depend in part on the form of organization you and your colleague have selected to own your medical practice. It will also depend on how the Georgia courts choose to interpret a landmark decision by the Georgia Supreme Court, issued back in 1983, dealing with the derivative liability for acts of legal malpractice.

Derivative Liability for Non-Professional Debts and Obligations

He then explains: Typically, when two or more professionals join together in a practice, they form either a general partnership or a professional corporation.¹ (Other

‘The question of whether or not you can be held liable will depend in part on the form or organization you and your colleague(s) have selected to own your medical practice.’

forms of ownership, such as business corporations and limited partnerships, practically are not available to professionals, for various reasons beyond the scope of this article.) A general partnership, by law, is an association of two or more persons to carry on as co-owners a business for profit.² The rights and obligations of the partners usually are set out in a Partnership Agreement, which will cover governance of the partnership, distributions of profits and losses, and many other items.

Alternatively, a professional corporation is defined as a person or a group of persons, licensed to practice a particular profession, who elect to practice as a professional corporation.³ Ownership in a

professional corporation is vested in its shareholders, all of whom must practice the profession in which the professional corporation engages.⁴

At least in theory, there is a significant difference between a partnership and a professional corporation, in terms of the liability of the owners for non-professional debts and obligations. In a general partnership, all partners are jointly and severally liable for all debts and obligations of the partnership.⁵ In other words, if the assets of the partnership are insufficient to pay the debts and obligations of the partnership, as and when they become due, creditors may look to any or all of the individual partners to make good on any deficiency.

In contrast, shareholders in a professional corporation are only liable for the commercial debts and obligations of the professional corporation to the extent of the consideration paid for their stock. If the professional corporation does not have assets sufficient to cover its debts, creditors usually cannot successfully seek the deficiency from the individual shareholders.

This difference between partnerships and professional corporations, while significant in theory, may not have great significance in fact. In the ordinary course of business, large creditors dealing with professional corporations are not willing to extend credit or lease office space, for example, without the

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individual guaranties of the shareholders. This is designed specifically to circumvent the "limited liability" of the shareholders, by requiring them to individually guaranty payment of the professional corporation's debts and performance of its obligations. Nonetheless, there may be situations where shareholders in a professional corporation are shielded from liability for the commercial debts and obligations of the corporation, in the absence of personal guaranties.

Derivative Liability for Professional Malpractice Claims

The joint and several liability of partners in a general partnership extends not only to business obligations, but also to acts of professional malpractice. By law, every partner is an agent of the partnership, is authorized to bind the partnership, and is liable for the debts and obligations of the partnership.⁶ Thus, in a medical partnership, were one of the partners to engage in an act of professional malpractice, the partnership would be liable for any damages resulting from the malpractice. Additionally, as indicated above, if the partnership's assets were insufficient to cover these damages, the injured party could look to all of the partners in the partnership to cover the deficiency.

Derivative liability in the context of a professional corporation is a much more complicated situation. Under the Georgia Professional Corporation Act, a professional remains liable for his or her own acts of malpractice, regardless of the fact that the person has elected to practice as a professional corporation.⁷ Thus, a physician who chooses to practice as a professional corporation cannot shield himself or herself from liability for medical malpractice by claiming the "limited liability" typically pro-

vided to shareholders; at least with regard to professional liabilities, the law requires that the physician be personally liable for his or her own acts of professional malpractice. The Georgia Professional Corporation Act, while dealing with the liability of a professional to his or her client, does not go further, in terms of covering the potential for derivative liability for the actions of other shareholders in the professional corporation. From this, it was assumed, at least until 1983, that the "limited liability" of shareholders in a professional corporation would extend to protect those shareholders from liability arising out of the professional malpractice of another shareholder in the professional corporation. In that year, however, the Georgia Supreme Court decided the *Zagoria* case,⁸ thereby raising significant questions as to the validity of this assumption.

In the *Zagoria* case, Mr. Zagoria and another attorney were the only two shareholders of a professional corporation. Mr. Zagoria, while acting as closing attorney, issued checks and withdrew funds from the professional corporation's escrow account, resulting in the dishonoring of the checks. The client sued not only Mr. Zagoria and the professional corporation, but also the other shareholder. The other shareholder, who was not involved in the transaction, defended on the grounds that, as a shareholder in a professional corporation, he had "limited liability," and was not responsible for the actions of his co-owner.

The Supreme Court disagreed, finding that all shareholders in a professional corporation of attorneys are liable for the legal malpractice of any of the shareholders in the professional corporation. At least in theory, the Court based its decision on its duty to regulate the practice of law, noting that "the

professional nature of the law practice and its obligations to the public interest require that each lawyer be civilly responsible for his professional acts. A lawyer's relationship to his clients is a very special one. So also is the relationship between a lawyer and the other members of his or her firm a special one. When a client engages the services of a lawyer, the client has the right to expect the fidelity of other members of the firm. It is inappropriate for the lawyer to be able to play hide-and-seek in the shadows and folds of the corporate veil and thus escape the responsibilities of professionalism."⁹ Thus, Mr. Zagoria's co-owner was found to be responsible for Mr. Zagoria's improper acts.

Viewed narrowly, the Court's decision in *Zagoria* would not appear to raise questions concerning the derivative liability of shareholders in other types of professional corporations. The Court, while responsible for regulating the practice of law, is not responsible for regulating other professional practices, including the practice of medicine. Accordingly, one could argue that the *Zagoria* opinion should not result in eliminating the "limited liability" of shareholders in professional corporations, other than those comprised of attorneys.

Viewed more broadly, however, it would seem that the same considerations involved in the *Zagoria* case could be prevalent in a case involving a professional corporation of physicians. The practice of medicine, like the practice of law, has a "public service" aspect. The Court in *Zagoria* noted its responsibility to assure "that the law practice will be a professional service and not simply a commercial enterprise. The primary distinction is that a profession is a calling which demands adherence to the public interests as the foremost obligation of the practitioner."¹⁰ Arguably, this

same analysis would apply to the practice of medicine.

Similarly, it could be argued that a patient engaging the services of a physician has the right to expect the fidelity of the other members of the physician's professional corporation. From this, the argument would continue, physicians ought to be no more authorized to "play hide-and-seek in the shadows and folds of the corporate veil" of a professional corporation than are attorneys.

The *Zagoria* opinion raises doubts as to whether a physician shareholder in a professional corporation may limit his or her liability for the acts of professional malpractice of other shareholders in that professional corporation. To date, no appellate case has arisen, since *Zagoria*, where a patient has sought to obtain this type of deriva-

tive liability in a medical malpractice action. Under the right set of facts, however, it is likely that a plaintiff will make this claim, and the appellate courts will be required to deal with this specific issue.

Conclusion

Having listened to your attorney explain the issues involved, you now understand more fully that the choice of a partnership or a professional corporation, as the vehicle for owning a medical practice, may be a significant one. Certainly, in appropriate circumstances, selecting to practice as a professional corporation may result in insulating the shareholders from some of the debts and obligations of the professional corporation.¹¹ In terms of professional liability, it is still an open issue as to whether or not one

physician in a professional corporation will be held liable for the professional malpractice of another shareholder in that professional corporation.

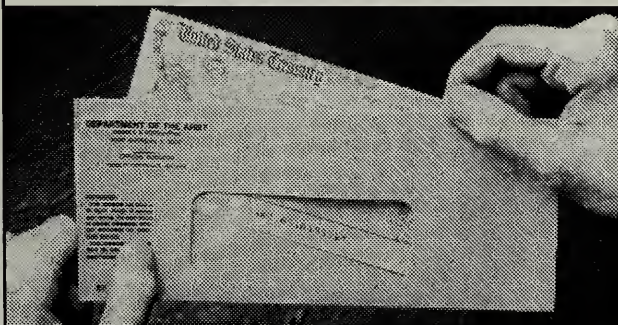
Notes

1. Professionals may also join together to form a Professional Association (PA), a sort of partnership/corporation hybrid. While there are differences between a PC and a PA, they are not material to the issues discussed in this article. See O.C.G.A. 14-10-1 et seq.
2. O.C.G.A. §14-8-6(a).
3. O.C.G.A. §§14-7-2(e), 14-7-3.
4. O.C.G.A. §14-7-4(a).
5. O.C.G.A. §14-8-15.
6. O.C.G.A. §§14-8-9(1), 14-8-13.
7. O.C.G.A. §14-7-7 ("Nothing contained in this chapter shall . . . change the law or existing standards applicable to the relationship between the person furnishing a professional service and the person receiving such service . . .").
8. *First Bank & Trust Company v. Zagoria*, 250 Ga. 844, 302 S.E.2d 674 (1983).
9. *Id.*, 302 S.E.2d at 675.
10. *Id.*, 302 S.E.2d at 675.
11. By the same token, professional liability insurance — for the ownership vehicle and its principals — will serve to limit exposure to liability to medical malpractice claims.

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*Medical Staff Bylaws: A Double Edged Sword**William B. Jones, MD*

MEDICAL STAFF Bylaws: Reviewed with groans only after the paper they are written upon turns yellow and cracks with that wasteland of legal "whereases," "therefores," and "notwithstandings." The mantra used by the god of sleep, Hypnos, to induce somnolence. In these challenging times, however, the Medical Staff Bylaws take on new meaning. They are the primary vehicle by which clinical autonomy and patient advocacy is maintained by the physician or lost to the bottom line economic needs of the hospital. The Bylaws will be battleground over the ultimate purpose of hospitals. Are they to be institutions primarily concerned with their own self preservation or with delivering the highest possible quality care given the present and future economic constraints? Gentle reader do not yawn yet! Follow, if you will, the transformation of this sleepy document from a legally required but much neglected rag to a razor double edged sword disregarded only at your peril.

It takes very little insight to appreciate the predicament of the hospital industry over the last decade. Revenue has declined at an alarming rate ever since 1984, when the government's cost-based reimbursement was replaced by the DRG prospective reimbursement. The general economic downturn of the last 4 years has increased the indigent care load, while increasing third party payer

‘Ah! The Medical Staff Bylaws! The dull, dusty, disregarded document that no self-respecting physician would stoop to pursue carefully. . . .’

managed care activity has severely restricted the hospitals ability to cost shift. The result? More red ink, more marginal hospitals, more hospital closures. As the remaining hospitals frantically sought for ways to stem this financial exsanguination, one fact became clear. The income generator was not the hospital administrator, nor was it the patient. Neither were administrator or patient cost centers. All billable charges and all costs were ultimately the result of physician activity.

From a keen appreciation of these economic realities, many in the hospital industry sought as their financial savior the reversal of the traditional relationship which gave physicians dominate authority over medical decisions (and thus, cost and revenue). The ideal new relationship would be one in which the hospital could control which physicians use the hospital and how they

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use it. The hospital's bottom line would become the physicians' primary concern. But how could this be accomplished? How could the physicians be reduced to the status of employees?

Ahh! The Medical Staff Bylaws! The dull, dusty, disregarded document that no self-respecting physician would stoop to pursue carefully (and to the few that did, the confusing legal jargon would yield insignificant enlightenment).

In the pre-DRG era, the Bylaws, while required by the JCAHO (then JCAH) and state and federal law, were honored more in the breach than in the observance. Hospital reimbursement from almost all third party payers was cost-based, cost shifting was widespread and accepted. Heavy utilization equaled large reimbursements, DRGs were unknown, "bad doctor's" were those that admitted patients infrequently, and managed care referred to the nurturing and encouragement of the big admitters. Regardless of the specifics of the Bylaws, hospital administrators were loathe not to "rock the boat."

Imagine Hiroshima and Nagasaki after the atomic bomb: complete devastation. Then we can appreciate the hospital industry's horror when the implications of prospective pricing sunk in. But wait! It was hospital, not physician, DRGs. The hospitals were hung out to dry

while the physicians' economic incentives were pretty much unchanged. The big admitters, especially if they had the wrong patient mix (i.e., sicker, poorer) were suddenly transformed into the proverbial bull in the hospital's financial china shop. In essence, the financial incentives had changed radically for the hospital, very little for the physician. And as time would show, revision of the Medical Staff Bylaws would be the vehicle used to attempt to redress this imbalance.

‘Gentle reader, do not yawn yet. Follow the transformation of this sleepy document from a legally required but much neglected rag to a razor double edged sword disregarded only at your peril.’

The long-neglected Bylaws were dusted off and revisited by the hospital governing boards. The relationship between the medical staff and the governing board were subject, unilaterally to new interpretation in light of the new needs. An essential need was subservience of the medical staff to the governing board. This could be achieved, in time, if the medical staff lost its status as a separate, self-governing entity with an explicit or implicit contractual arrangement with the hospital. Thus, the staff would become a department (such as Nursing, Dietary, Housekeeping) subject to the dictates of the administration. Another need was to reduce cost and increase revenue. This could be assured through economic credentialing, i.e., granting or renewing privileges based

primarily on the physician's practice patterns. Those with the "correct" (most revenue per DRG) practice patterns would be let in, others need not apply (or reapply). Of course these changes would require modification of the Bylaws, which must be done bilaterally (JCAHO requirement).

The most effective representative of this new interpretation was the Pittsburgh law firm Horthy, Springer and Mattern. Their eloquent and persistent advocacy created a great deal of controversy between the AMA and the AHA. This led to the development and publication of *AMA-AHA, The report of the Joint Task Force on Hospital-Medical Staff Relations* (February 1985), where the rights and obligations of each entity were spelled out. The Horthy firm (among others) were the hospitals' representatives, while Richard Vincent, J.D., of Atlanta, espoused the AMA's view. However, by its subsequent actions, the Horthy firm appeared to back away from many of the conclusions of the report. In fact, they became one of the leading advocates of medical staff subjugation.

Out of this grew the Estes Park Institute Seminars, a Horthy-run organization where many hospitals sent their medical staff leadership for the hospital-oriented interpretation of the Bylaws (while giving little or no attention to the AMA interpretation). The leadership was made to believe that there was a significant potential anti-trust exposure if Bylaws where not altered. And while much time was given to the fiduciary responsibility of the medical staff leadership, little was given to the physician's primary obligation: the patient's welfare.

Subsequently, more of the hospital industry seemed to move in the direction of medical staff subjugation. As Dr. Gwynn Brunt, of Atlanta, mentioned in the August,

1992, Hospital Medical Staff Column of this journal, The Health Care Advisory Board, a Washington, D.C., organization that represents hospitals throughout the country, has issued a 250-page document entitled: "Competitive Strategy: 10+ Long-Term Strategic Positions for Hospitals." The best strategy advocated is physician employment by the hospital. This is pushed as by and far the best way to control cost while maximally expanding revenue. The document referred to by Dr. Brunt will be released only to member hospitals (see box), but an executive summary can be obtained from the AMA library (312-464-4818). This report recommends certain Bylaw changes to allow for purchase of physicians' practices and other means of economic credentialing (usually referred to as medical staff development).

‘Imagine Hiroshima and Nagasaki after the atomic bomb: complete devastation. Then we can appreciate the hospital industry's horror when the implications of prospective pricing sunk in.’

One of the difficulties of adequate physician response to the Bylaw issues has been that these are discussed in legal terms with widespread, complex legal ramifications. Physicians are frequently (like everyone else) naive outside their area of expertise. They fail to realize that "the law is that which is eloquently proclaimed and persistently maintained." Thus, without this counsel, they are no

match for the hospital's attorney, and hospitals have traditionally gone to any length to discourage the medical staff from obtaining this counsel. Thus, it is through incomplete representation of the issues that the medical staff leadership is convinced of the validity of the requested revisions. The medical staff as a whole usually follows the leadership, and the bilateral requirement of the JCAHO is achieved when the governing board also agrees to the changes. This has happened in hospitals throughout the nation, and in many hospitals in Georgia. But all is not as dismal as it seems.

‘From a keen appreciation of these economic realities, many in the hospital industry sought as their financial savior the reversal of the traditional relationship which gave physicians dominate authority over medical decision (and thus, cost and revenue).’

In 1982, the Hospital Medical Staff Section (HMSS) of the AMA was created when a few far-sighted physicians saw the coming conflict. Through this Section, specific medical staff concerns could be recognized and dealt with in a timely fashion. In the subsequent decade, the Section has increased in size, influence, and effectiveness. Awareness of key issues is spread through the semi-annual HMSS meetings and through regular distribution of updates. In 1982, California published the first Model Medi-

cal Staff Bylaws. This landmark document was the first comprehensive declaration of the physician's perspective consistent with the JCAHO and state and federal statutes. It is in fact a living document that is continually updated. Subsequently, Ohio, Pennsylvania, and others followed suit in developing bylaws that allowed physicians to carry out their primary responsibility, which is the delivery of quality patient care.

Approximately 3 years ago, the Georgia HMSS decided to develop its own Model Medical Staff Bylaws in response to the increased pressure felt by our colleagues from various hospital governing boards. We were fortunate enough to enlist the invaluable help of Richard Vincent, J.D. The working principle in developing these Bylaws was to achieve a proper balance between the legitimate needs of the medical staff and those of the governing board. These Bylaws were to be annotated where controversy was felt to exist. The present document (it will never be finished, for it will be continually revised as need arises) is arguably one of the best in the nation.

Once completed, however, we were assured from more than one group outside of the HMSS that distribution of these bylaws would trigger antitrust litigation. Therefore, they were subject to intense review by an independent counsel and the General Counsel of the AMA. In both instances, no such significant liability was felt to exist. These Bylaws are physician user friendly and incorporate several key elements. Among them are: the establishment of the medical staff as a self governing, separate entity having a contractual relationship with the governing board; maintenance of all credentialing and peer review activities within the bylaws; economic credentialing explicitly pro-

hibited; clear, specific due process procedures; the right of the medical staff to have independent legal counsel. Although it is recognized that controversial elements might be found (from the hospital's standpoint), we feel that a willingness to review or revise the hospital's present bylaws on the basis of our Model Medical Staff Bylaws is an indication of the board's desire to work with the medical staff as co-equals. (These Bylaws can be obtained from the law firm of Vincent, Chorey, Taylor and Feil in Atlanta; 404-841-3200.)

‘After DRGs, the financial incentive had changed radically for the hospital, very little for the physician. And as time would show, revision of the Medical Staff Bylaws would be the vehicle used to attempt to redress this imbalance.’

Georgia has many fine hospitals of which we can be proud. In the overwhelming majority these institutions, the medical staff and the governing board work hand-in-hand for the good of the community and of the individual patients. However, these are uncertain times with uncertain pressures exerted on both physicians and hospitals. Let us not lose sight of our duty. Let us not forget that the primary purpose of the hospital is to provide bricks and mortar and equipment to enable physicians to deliver the highest quality patient care. That the purpose for which the profession exists is to serve the public, not a corporate entity. That when hospitals work with physicians as

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partners rather than subordinates, a proper balance can be struck, so that continued quality care can be delivered. And, finally, that the properly constructed Medical Staff Bylaws are the mechanism to achieve that balance. Georgia now has a readily available set of such bylaws.

“The working principle in developing MAG’s Model Medical Staff Bylaws was to achieve a proper balance between the legitimate needs of the medical staff and those of the governing board.”

Gentle reader, the sword is there. Use it to advance the cause of medicine and of your patients.

Practice Automation: An Essential, Not Luxury, Tool

Karen M. Wood

COMPUTERIZING a medical practice is no longer a luxury. It is a necessity if a practice is to survive the chaotic environment of our health care delivery and payment systems. If your practice is not automated, get automated now!

If you are automated, is the computer being used as a management information system (MIS) or only as a data gatherer for billing? This is a crucial distinction, and one that significantly affects practice success. Make sure all facets or capabilities of your system are installed and being maximally used. Schedule a time each month to review the month-end management reports. If computer reports are confusing or do not contribute to decision-making, consider reformatting the data into a more concise document to present the information in a relevant and understandable fashion.

The quality of a computer system depends on the software, or programs, selected. An appropriate system will organize all information a practice needs to keep a competitive edge, reduce paperwork, perform routine administrative tasks with greater efficiency, and enhance the overall professionalism of the practice.

Computer Needs Assessment

Whether considering an initial purchase or system replacement, the selection process should always begin with a "needs assessment" or a shopping list. Together,

‘The key to appropriate software selection is to approach the process with specific practice goals in mind, involve everyone in the practice, and identify the specific strengths and needs which will make the practice more efficient and effective.’

physician(s) and staff must specify the goals the practice is trying to achieve and the necessary efficiencies or "needs" that will help in accomplishing those goals. Also important is the identification of other computer systems the practice would like to link with or access for information, such as a hospital's computer or remote office. Reformatted, the "needs list" comprises the Request for Proposal (RFP) and is sent to software vendors for a quote. It may take 3-4 weeks to collect the RFP informa-

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tion, but this process narrows down the prolific number of medical software vendors to a handful of products that will substantially meet the practice's requirements. These products can then be compared efficiently with in-office demonstrations and feed-back from practices already using the system.

When evaluating systems, never buy promises! Make sure *all* important features of the software are successfully in use. This should also include any future needs of the practice. Be sure to interview and, if feasible, visit references or colleagues that use the system, especially those with similar goals and needs.

Solicit Staff Help

The RFP approach can be time consuming. However, the process is worth the time and effort. Having vendor demonstrations before a "needs list" is developed confuses the real goals for a practice. It is wise to have one person responsible for coordinating the computer search and implementation process, but all practice staff should be part of the selection process. Employee input is essential for acceptance of change. Once the system choice is made, it is critical that all parties commit to making the installation and continued use of the system successful. Depending on the computer expertise available in the practice, it may be cost effective to work with a practice

management consultant. A consultant can help with the RFP and/or the decision process, assist with implementation to ensure a smooth transition to a new information system, and teach the practice how to use information in managing staff and scarce resources. Vendors have a tendency to underestimate the chaos that can accompany a computer installation and often are unable to assist the practice with interpreting management reports. Software today is elaborate, expensive, useful, functional, and gives excellent information when selected and used correctly. The key to appropriate selection is to approach the process with specific practice goals in mind, involve everyone in the practice and identify the specific strengths and needs which will make the practice more efficient and effective. Each practice's requirements will differ based on the key issues and nuances of daily operations.

“Hardware should be compatible with the software and offer an operating system that can grow with the practice without significant investment in different hardware at a later date.”

Vendor Evaluations

It is essential to buy only from a software vendor who has a proven track record with physician practices. Learn how many systems a vendor has installed, where they are geographically, how long they have been in place, and what specialties are represented. The quality

Software Features to Consider

- **Multiple fee schedules with detailed adjustment information to evaluate participation with employers, insurers, HMOs, and PPOs**, such as the difference between (1) the standard practice charges and special fee schedule charges, (2) the practice charge and approved amount, and (3) the approved amount and actual payment;
- **Comprehensive, up-to-date accounts receivable aging information** with sufficient detail to quickly identify outstanding third party responsibility and patient responsibility with the patient's statement reflecting both responsibilities;
- **Patient recall announcements** by diagnosis, last date of service and/or procedure code to better improve patient services and reduce risk exposure;
- **“Open item” accounting** to improve collection communications with third party payers and patients;
- **Personalized clinical and collection form letters** which pull patient-specific data from the computer files;
- **On-line, itemized patient co-pays** at the time of service for better collections;
- **Daily (at least weekly) electronic claims filing and weekly cycle billing for patients** to improve cash flow and reduce payment delays;
- **New technologies** such as voice recognition, pen-based entry and/or electronic scanning;
- **Computerized medical records** with the ability to access specific clinical information for retrieval, analysis and patient management;
- **Automated appointment, surgery, and procedural scheduling** for better time management and use in multi-doctor practices;
- **“On-the-fly” documentation** of collection/clinical conversations with patients and tracking of information;
- **Retrieval of employer and patient demographic information;**
- **Specific revenue information for each referral source** by payer type;
- **Practice productivity by CPT code** to analyze service exposure and marketing opportunities;
- **Ad hoc management reports on any data element captured in the system** without incurring outside programmer charges.

and suitability of the software for your specific practice should be the main consideration for selection. But vendor reputation, financial stability, frequency of upgrades, and commitment to customer support are also extremely important in protecting your investment. Hardware should be compatible with the software and offer an operating system that can grow with the practice without

significant investment in different hardware at a later date.

System Support

Maintaining a relationship with a vendor through a “software maintenance contract” is very important. With reimbursement and reporting rules and regulations changing almost daily, a practice can quickly increase their medico-legal risk if software upgrades are not ac-

Hardware Issues to Consider

- **Computer-to-computer communication** with the hospital(s) to request consults, review clinical results, check in-patient status, access billing information, etc.;
- **Work-stations conveniently placed throughout the practice** so *all* staff may access the computer for data capture, look-up and/or verification;
- **A PC platform using a Local Area Network (LAN)**, in order to capitalize on technology trends, provide flexibility for Practice growth and enhance the possibility of interfacing in the future with a hospital, satellite office and/or consulting provider;
- **The variety of printing needs** and appropriate locations for efficient, cost effective printers; and,
- **The capability of loading other "off-the-shelf" software** for accounts payable (including check-writing capability), general ledger, inventory, budgets, cash flow analysis, etc.

quired. The price may seem high but if an interactive relationship is developed with a vendor, the benefits can be tremendous. Determine if cost-effective training and modem support will be available for staff and be sure that the system manuals are understandable and offer complete step-by-step instructions. The opportunity to interact with other users of the system, or participation in advanced training opportunities, keeps staff encouraged and interested in features of their system. It is not essential that hardware maintenance be supplied by the software vendor. However, the "hardware maintenance contract" should guarantee rapid replacement to minimize computer down-time and interruption of office operations. It is always advisable to have an attorney review all contracts, including computer purchase and maintenance contracts.

Realistic Expectations

Computerization will not be an instant cure for practice problems. A computer will probably not reduce staffing nor will it eliminate the need for staff monitoring or supervision. It will not fix dysfunc-

tional systems or automatically make operations less confusing, complex, or error-free. If there are problems in a practice, a computer installation will only aggravate the situation and turn minor issues into major problems. Get help to solve any practice problems before beginning a computer system search.

“No one software product can serve all practices. Today, medical practices have particularly complex receivables and patient tracking responsibilities.”

No one software product can serve all practices. Today, medical practices have particularly complex receivables and patient tracking responsibilities. One reason for the complexity is the increasing involvement of third parties in the billing and collection process. The challenge is to find a

system that works for your situation. In addition to your unique requirements, some hardware and software considerations that we feel are necessary to successfully navigate through the 90s are listed in the boxes.

Most Importantly

Practice success in the 90's is related to information. The ability to gather, use and review meaningful information allows a practice to respond quickly to internal or external pressures. Set your sights high! Invest in a system that (1) provides sufficient information for managing the daily operations and marketing of your practice, (2) improves the clinical management of patients, (3) enhances the practice's ability to respond appropriately to patient needs, and (4) is supported by a software vendor committed to bringing the newest technologies to your office.

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Factors Affecting Return to Work After Job-related Injuries

Donald S. Bickers, MD, FACS

SINCE MY RETIREMENT from neurosurgical practice, I have served part-time as consultant in neurosurgery to the Howell Industrial Clinic in Atlanta. For me, as for our four orthopedic consultants, low back and neck complaints comprise a large percentage of patients presenting with job-related injuries and account for the greatest time loss and expense resulting from industrial injuries. Back and neck injuries predominant in the neurosurgical patients. Head injuries are less frequent.

Back patients, like those with other injuries, have among them a minority who resist returning to work after treatment. It occurred to me that an analysis of features common to the resistant patients could lead to a better understanding of the problems and may suggest some solutions to this pressing problem as well. Since all neurosurgeons are increasingly involved in management of patients, together with third, fourth, and even fifth interested parties, I thought that some of my impressions, often painfully acquired, might be of interest.

An analysis of the features common to the patients who resist returning to work and some suggested solutions.

All of us who have practiced even a few years are well aware of the profound changes which have occurred not only in medical care but in socio-economic and legal spheres as well. As any student of history knows, human nature changes little from one generation to the next. This is especially true in the case of job-related injuries. But social legislation, the rapid shift from a manufacturing to a service economy, and the explosion of litigation into almost every aspect of human affairs have served to complicate and, in many cases, hinder

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the successful treatment and return of injured persons to gainful activity. Because certain influences are so striking there is a tendency to over-simplify problems we encounter in dealing with the injured worker in our increasingly complicated society. It is useful to consider these influences chronologically in the pre-injury, injury, and post-injury periods.

Pre-injury Influences

Intelligence sets limits on learning capacity and the establishment of occupational skills and bears directly on a person's ability to communicate, comprehend, and make value judgments. Persons of below-average intelligence are usually limited to unskilled or semi-skilled labor which involves no management, no responsibilities. Persons of average intelligence, which form the largest group are usually skilled workers, including the lower level supervisors and foremen. Those persons of superior or very superior intelligence are capable of complex performance and managerial responsibility.

Educational limits are set by one's native intelligence, but the extent to which a person develops and utilizes his intelligence is influenced by personality and motivation. These characteristics range from the passive-dependent to the achieve-aggressive with variations in between. Clearly, those persons who are passive and dependent are most likely to be poorly motivated, easily discouraged, and have limited tolerance for stress. Such persons, especially if limited in intelligence and sophistication, are fair game for those who prey on their misfortunes for personal financial advantage.

Conversely, active aggressive individuals are much less likely to present problems in returning to work. Inactivity and resultant lowered standard of living are unacceptable to them. A secure and happy family life, emotional stability, good social adjustment, and the ability to deal with stressful situations are tremendous advantages in recovering from injury or illness. The lack of these personal characteristics is sometimes termed "constitutional inadequacy" and explains why persons who are poorly compensated by life in good times, can become totally ineffective after a relatively minor injury — one which leaves no permanent residuals.

Work Situation

The influence of the work environment can greatly affect the outcome of job-related injury. Both over-employment and under-employment can result in a more negative response than would otherwise be the case. The over-employed individual feels that he is being pushed beyond his capacity or abused by the demands made upon him. The under-employed individual feels that his true worth is not appreciated and his self-image suffers. He feels that if he were fairly treated he could move up in the organization with increased author-

ity, prestige or remuneration.

While neither of these attitudes may be justified objectively, in practice, reality is largely determined by one's subjective perception of his situation. New employees and their employers have often not had sufficient time to establish a relationship of mutual respect, loyalty and appreciation which develops with long association.

Social legislation, the rapid shift from a manufacturing to a service economy, and the explosion of litigation have served to complicate and often hinder the successful treatment and return of injured persons to jobs.

An all too familiar picture is that of an individual, often unskilled or semiskilled, who reports an injury in the first week or two of employment. (Falls or strains of the neck or low back comprise most of these reports and verification is at times impossible. Their work history may reveal similar episodes in the past.) A long-term employee tends to place a higher value on his job and prefers to minimize his complaints and lost time. One exception to this rule is seen with the unskilled or semiskilled male laborer in his mid-fifties who is tired and bored by a dull, repetitive job and would prefer to retire. Some, indeed, receive an unexpected call to the ministry.

Where there is a good employer/employee relationship, all mutual problems, including those of job-related injury, are easier to solve than when an adversarial situation exists. This is dramatically illustrated by the continuing conflicts in the airline industry which has been

very destructive to employer, employees, and the public. The potential effect on employees with work-related injuries is obvious.

If benefits, income, and retirement plans are inadequate, employee disinterest and disloyalty is one type of problem encountered. If these benefits are so generous that tax-free disability payments equal or exceed current income, the disincentive to return to work and the temptation to abuse the system is almost irresistible.

Injury Influences

We now turn to the immediate effects of the injury itself. Clearly, those injuries which are major or massive will legitimately require longer medical treatment, more recovery time and rehabilitation effort than do injuries of minor or moderate severity. Since it has been estimated that three out of four workers will sustain some degree of injury on the job in the course of their lifetime employment, it is fortunate that most of these injuries, though painful, are not serious and result in no permanent physical handicap.

Not only the severity but the parts of the body sustaining the damage affect the degree of anxiety felt by the patient. Most people instinctively fear injury to the brain, heart, spine and genitalia more than damage to other body structures. We instinctively realize that these organs are essential, not only to normal life but also to our survival. Loss of a limb or part of a limb is less mysterious and thus less frightening. Though painful and distressing, such injuries are not perceived as life-threatening. Surgery and prosthetic devices aid in reducing residual handicap. A most inspiring example of this is seen in the post-injury career of Georgia's Secretary of State, who leads an active and productive life, despite the fact that he is a triple-amputee as a result of combat injuries.

Burns and abdominal injuries

are dealt with in the acute phase by surgery which, if successful, result in less difficulty in achieving return to gainful activity. Electrical shock, interestingly, rarely produces permanent injury if instantaneous death does not occur.

Conflicting opinions by multiple examiners result in a patient becoming disillusioned, resentful, confused, and distrustful.

With all injuries, irrespective of their nature and severity, there runs a common thread of shock, disbelief, denial, self-pity, and frustration with resulting anger, in this progression. Frustration and anger may be directed toward attending medical personnel, especially if a perfect result from treatment cannot be achieved. Resentment toward his employer through the same mechanism does occur but can be helped by the employer's attitude and actions after the injury.

The best the doctor or nurse can do is to give prompt, competent, positively oriented, ethical medical treatment while striving to obtain a satisfactory relationship with the patient by demonstrating compassion and maintaining good communication with the patient. This can be a tall order, particularly where a third, fourth, and even a fifth party may be involved. Administrative difficulties make some physicians reluctant to accept workers' compensation cases.

Post-injury Influences

In the convalescence of the injured worker, the importance of a positive medical attitude designed to return the injured worker to gainful activity as rapidly as his physical progress permits cannot be over-emphasized. The ethical physician

recognizes this as an integral part of his responsibility to his patient and will encourage the patient to help himself. He will avoid unnecessary prolongation of medical services to his own economic advantage and the patient's detriment. Unfortunately, prolongation of treatment, based on misplaced sympathy, ignorance, or inexperience, all have the same effect of delaying or even preventing the patient's ultimate recovery regardless of the motivation of the physician.

There are generally accepted norms of recovery for specific injuries in response to treatment, behavior and recovery time. Most patients fall within reasonable limits of these averages. This is reflected in temporary total disability time and the attainment of maximal medical improvement. After maximal medical improvement is attained, any permanent residual can be ascertained. The attending physician is obligated to report on these matters to the patient, the patient's family and to other involved parties as provided by law, consistently and impartially. When the treatment is complete, and the patient is discharged, the physician should emphasize to the patient that no further treatment is needed or useful. The physician should avoid telling the patient on discharge that there is nothing more he can do since the patient is apt to interpret this statement as meaning that he is beyond help.

At this point, or often before, the rehabilitation counselor may enter the picture. Under Georgia law, rehabilitation counseling is mandated in the case of catastrophic injury or time loss of 105 days or longer. Under this provision counselors are engaged by the liability carrier to assist in arranging specialized rehabilitation, job retraining, and placement as needed. Counselors who establish a good rapport with the patient and his family and with treating physicians are very helpful. In this connection, how-

ever, it is important to realize that rehabilitation is primarily accomplished by the patient. The best that a counselor can do is to provide advice, encouragement, and arrange opportunities for needed services. It is then up to the patient to utilize these efforts for his own benefit. Without his cooperation nothing can be accomplished.

The influence of family and friends in the convalescent phase of a patient's recovery is often underestimated. When family and friends are encouraging and supportive in a positive way, recovery is facilitated. The reverse is true in an environment where disability is condoned, accepted, or encouraged. Discouraging pronouncements by family and friends are destructive. The physician should counsel the family accordingly.

No discussion of the effect of over-treatment in the development of the disability mindset would be complete without reference to the influence of "the chiropractic."

An employer can be supportive in the convalescent period by attending to the patient's administrative needs and by maintaining, insofar as possible, a constructive relationship with the worker. Controversy should be avoided where possible and liaison should be maintained with the liability carrier and the patient's physician. Above all, the worst mistake an employer can make is to discharge an injured worker without maximal medical improvement and release. This absolutely guarantees failure of medical and rehabilitation efforts and inevitably precipitates litigation.

Positive influences during conva-

lescence will in most instances result in recovery and return to work. A smaller group comprised mostly of back patients without positive findings will enter what has been called the "disability process." This occupies roughly the period between the third month and the end of the second year after injury. During this period, ineffective treatments, multispecialty examinations, multiple and sometimes painful tests are carried out. Surgery can almost always be obtained through persistent searching. When the only indications for surgery are pain, insurance coverage, and the patient's consent, such operations are foredoomed to failure. This makes matters worse by virtue of the traumatic experience, souvenir operative scar, and the real possibility of severe complications.

The proliferation of CT and MRI scans have produced mixed results in management of spinal complaints, some helpful, some destructive. The latter are due to "false positives" from overinterpretation of degenerative changes common in adult life as "bulging discs" or "herniated disc" which may be used to justify surgery without supportive clinical findings. Drug dependency or habituation from prolonged futile prescription of tranquilizers, sedatives, and pain medications present difficulties in withdrawal and re-education which is far more serious than the initial injury.

Conflicting opinions by multiple examiners result in a patient becoming disillusioned, resentful, confused, and distrustful. At the completion of the disability process, the patient develops what has been termed the "accommodation syndrome." He resigns from adult responsibility and normal living. He is content with a lower standard of living both for himself and for his family, is physically and mentally inactive, and resists efforts of others to break the pattern and restore

him to normal life. Well before the end of the disability process and certainly no later, the patient has entered the legal process to obtain financial support through workers compensation, tort action, and various private or governmental sources.

Mention should be made of secondary suits such as those against the operators of other vehicles at fault in collision accidents. Return to work is unlikely until litigation is resolved.

No discussion of the effect of over-treatment in the development of the disability mindset would be complete without reference to the influence of "the chiropractic." It was based initially on Dr. Palmer's tenet that human ails are caused by misalignment of the spinal column. A cure is effected by manipulation of that structure by those with the requisite knowledge.

Over the years the original 3-month training period of Dr. Palmer has lengthened increasingly, the vocabulary has expanded, and legal acceptance of chiropractic as a "healing art" has been obtained. Most chiropractors fortunately avoid involvement with patients whose disorders are serious or life-threatening and limit their activities to patients whose complaints are functional or less serious. Many of their patients have complaints following automobile accidents and job-related injuries.

Chiropractic assistance may be sought by the patient on the basis of prior experience, advice of family and friends, or referrals by attor-

neys or employers. If excessive manipulation is avoided and variation of physical therapy are used, the patient with bruises or sprains tends to improve, if his attitude is towards the treatment is positive. Repetitive forcible manipulation of the neck and low back with acute muscle spasm, however, tends to increase discomfort and prolong the symptomatology.

In the presence of a structural disease of the spine such as arthritis, metastatic bone disease, or disc herniation, forcible manipulation may cause increased discomfort or occasionally serious injury. Such occurrences appear to have diminished with increasing sophistication on the part of the practitioners who are now more apt to refer patients with serious problems to neurosurgeons or orthopedists. Psychologic harm results from the fact that the treatments recommended are designed to continue for 1 to 2 years unless limited by some external factor. Initially, daily or tri-weekly visits are scheduled with reduction of frequency at intervals. Resulting expense and loss of wages can be great. As with unduly prolonged medical treatment the patient may be convinced by all of this activity that his condition is serious and perhaps permanent.

Legal Influences

Although litigation may enter the picture at any time in the post-injury period, it is almost inevitable. It would be remarkable if such were not the case in view of explosion of litigation in this country, particularly in the past decade. The contingency fee system, in which the plaintiff's attorney receives a percentage of the gross settlement, provides a major portion of the income of many attorneys.

While there are surely situations where legal assistance is needed to obtain a just settlement, it is by no means a universal need. A worker is often discouraged by his attorney from resuming any form of gainful

activity until a settlement is reached. The prolongation of this period inevitably results in poor morale. Often the lost wages exceed any settlement the patient receives. The adverse influence of litigation is great and may adversely affect recovery.

Not surprisingly, successful litigation can produce spectacular recoveries from complaints and alleged disabilities which hitherto have proved resistant to all other efforts to effect a cure. This has long been termed "the greenback poul-tice." Re-employment usually with a different employer may follow. Investigation of a past history in some instances reveal one or more prior episodes of like nature, each involving different employers.

Mention should be made of secondary suits such as those against the operators of other vehicles at fault in collision accidents. Return

to work is unlikely until litigation is resolved. The rapid increase in the number of attorneys with resulting competition for cases offers no prospect of improvement. The increasing use of advertising in print and television work strongly in the other direction. Increasing litigation coupled with extravagant and unrealistic expectations of perfection in medical treatment have contributed to spiraling malpractice lit-igations against physicians and hospitals. Physicians feel compelled to practice more defensively by eliminating newer or high risk surgical procedures. The increase use of defensive diagnostic procedures is estimated to account for 25% of the total patient expense. Second opinions should be obtained before elective surgery, especially that of the spine, if there is any reasonable doubt about the necessity of surgery.

It is easier to discuss the problems affecting return to work after work-related injuries than to offer solutions. It is my hope that this analysis may suggest certain measures which can be taken at least to mitigate the problems even though they cannot be eliminated entirely. Some of the more obvious include prompt reporting of the injury by the employer to the carrier, prompt and reasonable response to the injured worker's needs and selection of the competent and ethical medical care available. Improvement in quality control of treatment will be slow to come. Good communication amongst all involved parties will tend to minimize conflicts. A positively oriented program by management to encourage return will help reduce work time loss and expense. For all involved, the Golden Rule is still the best guide, although it is too often ignored.

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Coronary Heart Disease in Women: Status 1992

Nanette K. Wenger, MD

ONLY RECENTLY has coronary heart disease been perceived as a serious problem for U.S. women, despite being their leading cause of death, accounting for 28% of all fatalities. Indeed, almost half of the 500,000 annual U.S. deaths due to coronary heart disease occur in women. Coronary heart disease is predominantly a disease of older women, particularly after the age of menopause, increasing progressively in incidence from the sixth decade to equal that of men in the eighth decade. With aging of the U.S. population, more women currently live into old age, a time when coronary heart disease may become manifest. It remains poorly understood why coronary heart disease occurs later in women than in men, 10 years later for any clinical manifestation of coronary heart disease, and 20 years later for the occurrence of myocardial infarction.

In prior years, coronary heart disease in women was thought to have a favorable outcome, in that angina pectoris among women in the Framingham Heart Study (where it was their most common initial manifes-

It remains poorly understood why coronary heart disease occurs later in women than in men. . . .

tation of coronary heart disease) rarely progressed to myocardial infarction. This likely contributed to the lessened attention toward coronary heart disease in women and their lack of inclusion in clinical trials of coronary prevention and therapy. Although today we appreciate that many chest pain syndromes in women may mimic angina pectoris, it was only with the reporting of the Coronary Artery Surgery Study (CASS) Registry data that the magnitude of noncoronary

chest pain in women was appreciated; among patients referred for coronary angiography by their treating physicians to ascertain suitability for myocardial revascularization 50% of women as compared with 17% of men had normal coronary arteries. If such was the case in Framingham, and 50% of these women did not have coronary heart disease, it is not surprising that "angina" in Framingham women only infrequently progressed to infarction.

Women who sustain myocardial infarction, both in the U.S. and overseas, have a substantial increase in morbidity and mortality, both acutely and following hospital discharge,^{1,2} as well as an increased mortality with coronary artery bypass surgery³ and a lesser success with coronary angioplasty.⁴ Female gender is the most powerful predictor of adverse outcome from coronary artery bypass surgery. The reasons for this are largely unexplained, particularly since women often have less severe anatomic obstruction of their coronary arteries

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This article was originally presented as the Keynote Address of the American Heart Association Georgia Affiliate Program, "Women and Heart Disease," in Atlanta, May 9, 1992.

and better ventricular function, even following infarction; older age, which may not be separable from gender in many analyses, may be an important contributor.

Female gender is the most powerful predictor of adverse outcome from coronary artery bypass surgery.

An important need is earlier recognition of coronary heart disease in women.⁵ The poorer outcome following coronary artery bypass surgery and percutaneous transluminal coronary angioplasty may relate to these procedures being performed in women with more severe manifestations of the disease, at older age, or as an urgent or emergency procedure, all potentially related to late recognition of disease. Noninvasive testing less reliably identifies women with chest pain syndromes at high risk of coronary events than is the case for men; given the lower prevalence of coronary heart disease in younger women, there is a greater likelihood of false positive noninvasive studies. Among patients with abnormal exercise radionuclide studies, however, there is a predominance of men referred for coronary angiography, although comparable antianginal therapy is prescribed for both genders.

Is there bias in consideration of women for myocardial revascularization?^{6,7} Recent studies have documented fewer coronary angiographic procedures in women than men, as well as less coronary artery bypass surgery and percutaneous transluminal coronary angioplasty. One study showed comparable gender referral for coronary artery bypass surgery and percutaneous transluminal coronary angioplasty

among patients sent to angiography. Since these differences have not been related to outcome, it is not known whether this "bias" is appropriate, favorable, or detrimental.

Most therapeutic decisions for women with coronary heart disease are extrapolated from studies conducted predominantly among middle aged men. Equal gender benefit was evident in the few studies that included women: beta blocking drugs following myocardial infarction, postinfarction aspirin therapy, etc. Although thrombolytic therapy has equal efficacy in women and men, however, an increase in bleeding complications, particularly serious intracranial bleeding, occurs in older women. Is this a manifestation of a relatively increased dosage with a generally fixed-dose regimen of thrombolytic agents, given the generally smaller body mass of women, or is it an age-related problem? However, despite documented benefit, there is underutilization of thrombolytic therapy even for eligible women with acute myocardial infarction.⁸ Important gender considerations for pharmacotherapy may relate to the smaller coronary artery size of women owing to their lesser body mass, with possible implications for greater effects of coronary vasomotion. Interrelationships of cardiovascular drugs and hormonal therapy may also be important.

Although women benefit equally from exercise rehabilitation following a coronary event, they have an excessive drop-out rate from formal exercise rehabilitation regimens. Does this relate to the time and format of these programs designed for the predominant population, middle-aged working men? Is there difference in social support? Return to work for women is later and less than that for men following coronary artery bypass surgery; is age a contributor? This is suggested by the more favorable psychosocial, including return to work, outlook

of women following valve replacement (typically at younger age) than following coronary artery bypass surgery.

A major missed opportunity related to the misperception of coronary heart disease as a benign problem in U.S. women is the lack of emphasis on coronary preventive care for women. Men and women share the conventional coronary risk factors, the most prominent of which are hypercholesterolemia, cigarette smoking, and hypertension. Nevertheless, even among these shared risk factors, questions remain as to the appropriateness of extrapolation of data derived from populations consisting predominantly of middle aged men to women of all ages. Further, the issue of prevention in women may not be completely separable from issues of prevention in the elderly.

Important gender considerations for pharmacotherapy may relate to the smaller coronary artery size of women owing to their lesser body mass, with possible implications for greater effects of coronary vasomotion.

Classical coronary risk factors remain operative in the elderly; despite their lesser relative risk, there is a greater absolute risk given the increased likelihood of development of coronary heart disease in this population. Thus intervention on classical coronary risk factors has a substantial potential to decrease coronary heart disease in women, most of whom develop clinically manifest coronary heart disease at older age. Although HDL

cholesterol levels do not decrease in the perimenopausal period, there is a sharp increase in both LDL and total cholesterol levels, to exceed those in men of comparable age. The role of triglycerides remains uncertain, but is likely more important for women. Exercise seems effective in lowering levels of blood pressure in women, independent of weight loss; and exercising women appear to have better outcomes with comparable cholesterol levels than their sedentary counterparts.

Several potential coronary risk factors unique to women include oral contraceptive use, hysterectomy and menopause. As regards postmenopausal hormonal replacement therapy, several studies suggest that estrogen replacement therapy⁹ decreases coronary heart disease and stroke; such therapy may confer benefit by increasing HDL and decreasing LDL cholesterol levels; additional potential mechanisms of benefit include decreased lipid uptake into the vascular wall and estrogen receptor-mediated favorable effects on coronary vasomotion. Data from nonrandomized studies suggest both a lesser coronary angiographic severity of atherosclerosis and a sizeable survival benefit associated with estrogen replacement therapy; because of the risk of endometrial cancer, addition of progestin has been recommended. To date, combined estrogen/progestin regimens have not been well stud-

ied as to efficacy in coronary risk reduction. It is also uncertain whether or not estrogen replacement therapy increases the risk of breast cancer. Currently, clinical decisions regarding hormone replacement therapy must be individualized, depending on the competing risks of coronary heart disease, menopausal symptoms, cancer, and osteoporosis.

A major missed opportunity related to the misperception of coronary heart disease as a benign problem in U.S. women is the lack of emphasis on coronary preventive care for women.

In a recent paper, I described the contemporary problem of coronary heart disease in U.S. women as being characterized by myths, misperceptions, and missed opportunities: the myth that coronary heart disease is a benign problem, the misperception of epidemiologic data because of lack of anatomic confirmation of coronary heart disease in women until the availability of the Coronary Artery Surgery Study Registry data just

cited, and the missed opportunity both for preventive therapies and for early recognition of coronary heart disease.⁵ These issues offer exciting research opportunities in many areas — epidemiologic, basic science, studies in animal models, biobehavioral and psychosocial investigations, as well as intervention trials in apparently healthy women and in women with coronary heart disease.¹⁰

References

1. Greenland P, Reicher-Reiss H, Goldbourt U, et al. In-hospital and 1-year mortality in 1,524 women after myocardial infarction: Comparison with 4,315 men. *Circulation* 1991;83:484-491.
2. Tofler GH, Stone PH, Muller JE, et al. Effects of gender and race on prognosis after myocardial infarction: Adverse prognosis for women, particularly black women. *J Am Coll Cardiol* 1987;9:473-482.
3. Kennedy JW, Kaiser GC, Fisher LD, et al. Clinical and angiographic predictors of operative mortality from the collaborative study in coronary artery surgery (CASS). *Circulation* 1981;63:793-802.
4. Savage MP, Goldberg S, Hirshfeld JW, et al. Clinical and angiographic determinants of primary coronary angioplasty success. *J Am Coll Cardiol* 1991;17:22-28.
5. Wenger NK. Gender, coronary artery disease, and coronary bypass surgery. *Ann Intern Med* 1990;112:557-558.
6. Steingart RM, Packer M, Hamm P, et al. Sex differences in the management of coronary artery disease. *N Engl J Med* 1991;325:226-230.
7. Ayanian JZ, Epstein AM. Differences in the use of procedures between women and men hospitalized for coronary heart disease. *N Engl J Med* 1991;325:221-225.
8. Maynard C, Althouse R, Cerqueira M, et al. Underutilization of thrombolytic therapy in eligible women with acute myocardial infarction. *Am J Cardiol* 1991;68:529-530.
9. Barrett-Conner E, Bush TL. Estrogen and coronary heart disease in women. *JAMA* 1991;265:1861-1867.
10. Wenger NK, Speroff L, Packard B (eds). *Cardiovascular Health and Disease in Women. Proceedings of a National Heart, Lung, & Blood Institute Conference, January 22-24, 1992*. LeJacq Communications, Inc., Greenwich, CT. (In Press).

1992 Cumulative Index

Journal of the Medical Association of Georgia

Volume 81

Month	Pages
January	1-44
February.....	45-96
March	97-152
April.....	153-200
May	201-256
June	257-340
July	341-404
August	405-450
September.....	451-534
October	535-586
November	587-647
December	647-694

Author Index

—A—	
Abel, Gene G., MD	209, 237
Allman, Fred L., Jr., MD	307
Anderson, Thomas J., Jr., MD	262, 346, 408 456, 540, 584, 593, 652
Apple, David F., MD	323
—B—	
Baker, Champ L., MD	301
Barnes, Waddell, MD	633
Barrett, Drue H., PhD	237
Barton, Stephan C.	361, 421, 479, 601
Bean, Robert	553
Bickers, Donald S., MD	673
Berg, Robert N.	139, 189, 425, 661
Brand, Robert L., MD	293
Brunt, Gwynne T., Jr., MD	425
Brunt, Ingrid H.	347
Burge, Dan, MD	329, 600
Burns, Matt, MD	329
Burton, Joseph L., MD	433
—C—	
Cantwell, John D., MD	311
Chait, Donald C., MD	17
Chandler, Joseph R., MD	289
Chiu, Michelle K., BS	442
Comerford, James D.	31
Costantino, Mark J., MD	27
—D—	
Dudley, A. Gatewood, MD	77
—E—	
Eisner, Robert L., PhD	61
—F—	
Faria, Miguel A., Jr., MD	119, 165, 615
Ferguson, John A., Jr.	458
Foster, Martha J.	23
Fox, Andrea H.	247, 555
—G—	
Gardos, Peter S., BA	237
Garner, Cyler D., MD	8, 50, 102, 159, 206
Gershon, Charles R., MD	83
Griffin, Letha Y., MD, PhD	285

—H—	
Haines, Richard D., Jr.	611
Haney, Cynthia	19, 607
Hardcastle, Carol Ann	595, 654
Henderson, John M., DO	277
Henderson, M. Suellen	89
Hirshfeld, Edward B.	489
Houghton, Jan L., MD	69
Hughes, Carol, RN, MSN	87
Hughston, Jack C., MD	273
Hunter, Stephen C., MD	283
—J—	
Jacobson, Kurt E., MD	297
Jones, William B., MD	665
—K—	
Karpas, Anthony E., MD	227
Klingbell, Clifford K.	601
—L—	
Lammert, Steve, MD	311
Lang, Howard, MD	473
Law, Edward J., MD	185
Leiblum, Sandra R., PhD	221
Levine, Stephen B., MD	211
Lewis, John R., MD	348, 448
Little, Felicia M., MD	437
Liu, Stephen H., MD	297
—M—	
Majmudar, B., MD	77
Marks, Mary Ann	375
Masterson, Kathleen C., MD	77
Matthews, Gary	363, 423, 486, 549
McDaniel, J. Stuart, MD	83
Messer, Alfred A., MD	53, 637
Mulherin, William B., MD	317
—O—	
Orler, Herman A., MD	185
—P—	
Pais, Ray C., MD	437
Patterson, Randolph E., MD	61
Peach, Paul E., MD	177
Price, Thomas E., MD	561

—R—	
Ragab, Abdelsalam H., MD	437
Rees, Philip M.	333, 483, 606
Renz, Barry M., MD	574
—S—	
Sacks, Linda M., MD	526
Schlant, Robert C., MD	51
Schley, T., MD	137
Schwartz, Phyllis R., MN, MA	377
Sherman, Roger, MD	574
Sherry, Richard M., MD	442
Silverman, Mark E., MD	33
Snelson, Elizabeth A., JD	495, 603
Spears, James M.	499
Stead, Nancy W., MD	569
Still, Joseph M., Jr., MD	185
—T—	
Talbott, G. Douglas, MD	565
Talmdage, Lynda Dykes, PhD	233
Talmdage, William C., PhD	233
Tippins, Barbara S.	372
—U—	
Underwood, Charles R., MD	13, 59, 103, 161, 207, 271, 353, 411, 469, 597, 657
—V—	
Vincent, Richard H.	483
von Haam, Julia	369
—W—	
Watkins, Martha C., MLS	143
Wei, John P., MD	442
Wenger, Nanette K., MD	679
Whigham, Charles H., MD	366
White, J. Maxwell, MD	217
Williams, James S., MD	75
Wilson, John P., MD	584, 642, 692
Winton, Elliot, MD	437
Wiskind, Anne K., MD	77
Wood, Karen M.	669
—Y—	
Yancey, Asa G., Sr., MD	621
Young, Harvey, PhD	127

Subject Index

—A—

- ABORTION**
U.S. Supreme Court Reaffirms Right to Abortion While Permitting Some State Regulation 555
- ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)**
Controlling the Spread of AIDS Confidential Information 333
Reporting Confirmed Positive HIV Tests: An Update 606
- ALCOHOLICS ANONYMOUS**
Alcoholics Anonymous and Addicted Health Professionals: The Georgia Experience 565
- ANKLE**
Anterolateral Impingement of the Ankle . . . 297
Ligamentous Injuries to the Lateral Aspect of the Ankle: The Ankle Sprain 293
- ANTITRUST**
Market Power, Collusion, and Exclusion in Health Care Antitrust Enforcement 499
- ATRIAL FIBRILLATION**
Diagnostic and Therapeutic Considerations in the Management of Atrial Fibrillation 33
- AUXILIARY TO MAG**
A-MAG Presents New Cookbook: Georgia Land — A Collection of Georgia Recipes, Historic Landmarks & Scenic Attractions s 375
Auxiliary Community Health Projects Span Generations 350
Family Violence: A National Epidemic 372
Just A Glimpse 347
Program Highlights—Auxiliary Annual Meeting 115
Teenage Pregnancy: Everyone's Responsibility 377
The Auxiliary 595
The Challenge: A Generation of "Growing Healthy" Children 369
The Gift of Giving Dec

—B—

- BASEBALL**
Shoulder Function and Dysfunction in the Baseball Pitcher 289
Of Who We Are Dec
- BOOK REVIEW** 163
- BRUXISM**
Bruxism, Neck Pain, and A History of Child Sexual Abuse 637
- BURN TREATMENT**
Experience with Cultured Skin in Georgia Regional Burn Unit 185

—C—

- CALENDAR** 10, 55, 110, 164, 352, 419, 515, 544, 599, Dec
- CANCER — SEE ONCOLOGY**
- CARDIOLOGY**
Advances In Cardiovascular Therapy 69
Cardiac Arrhythmias in Presidents and Other Athletes 31
Coronary Heart Disease in Women 679
Diagnostic and Therapeutic Considerations in the Management of Atrial Fibrillation 33
What's New in Cardiovascular Imaging in 1992? 61

CHILD ABUSE

- Bruxism, Neck Pain, and A History of Child Sexual Abuse 637
Child Abuse by Scalding 574

CLINICAL LABORATORY IMPROVEMENT ACT

- Questions and Answers: How Will CLIA-88 Affect Your Practice? 509

CODING

- Medical Record Documentation and the New Visit Codes 366

COMPUTERS

- Computerized Cancer Information Sources 143
Practice Automation: An Essential, Not Luxury, Tool 669

COOKBOOK

- A-MAG Presents New Cookbook: Georgia Land — A Collection of Georgia Recipes, Historic Landmarks & Scenic Attractions 375

COVER ARTIST 205, 263, 349

—D—

DATA BANK

- Rethinking Credentialing: Preventing Economic Credentialing, Data Bank Problems, and Other Troubles 603

DOMESTIC VIOLENCE

- Family Violence: A National Epidemic 372

DURABLE MEDICAL EQUIPMENT

- Cost to Society High for Bogus DME Orders 17
Medicare Rip-Off: DME Fraud Bleeds the System 23

—E—

ECONOMIC CREDENTIALING

- Rethinking Credentialing: Preventing Economic Credentialing, Data Bank Problems, and Other Troubles 603

EDITOR'S CORNER

- Of Chromosomes X and Y — Of Passion Of Country Music — Of Who We Are and Who We Wish To Be 103
Of Hope and The World of Diddly Poo ... 469
Of Our Color 271
Of Our Country 411
Of Our Values 161
Of Thankfulness 597
Of The Seasons of Our Lives 353
Of Who We Are 657
On Being a Doctor at the Year's Beginning 13
On Retirement 59

EDITORIAL

- Cost to Society High for Bogus DME Orders 17
Introducing Cardiology 1992 51
Introducing This Issue 273
Introducing This Special Issue 209
Pay As Much Attention to Firing As to Hiring 53

EMPLOYMENT PRACTICES

- Helpful Hints in Structuring Physician Employment Agreements 429
Maximizing Productivity of New Associate Physicians: Proven Strategies 363
Pay as Much Attention to Firing as the Hiring 53
Factors Affecting Return to Work After Job-related Injuries 673

ERECTILE DYSFUNCTION

- Medical Evaluation of Erectile Dysfunction 217

ETHICS

- Sexual Misconduct by Physicians 237

—F—

FEDERAL HEALTH CARE QUALITY IMPROVEMENT ACT

- Peer Review, Hearing Requirements, and Antitrust: Maximizing Federal Health Care Quality Improvement Act Compliance and Immunity 1

FEDERAL TRADE COMMISSION

- "And There's More..." — Federal Trade Commission Announces "New Concern" With Physician Joint Ventures 189
Market Power, Collusion, and Exclusion in Health Care Antitrust Enforcement 499

FINANCIAL

- Having Your Cake and Eating It, Too: Common Sense in Charitable Trust Planning 361
Introducing a New Department: Insurance and Financial 265
Juggling Fiduciary Responsibility (Part 2): Are You Saving Too Much for Retirement? 479
Juggling Fiduciary Responsibility — How to Avoid Dropping the Ball 421

—G—

GEORGIA MEDICAL CARE FOUNDATION

- Are We Too Busy? 542
Favoritism, the "Atlanta Bias," and Why Pick on Me? 600
From the Georgia Medical Care Foundation: "Premature Discharge" As a Peer Review Concept 329
Georgia Medical Care Foundation: Medicaid Precertification Announcement ... 457
Medicaid Precertification Department 355

GERONTOLOGY

- The Ageless Athlete 283

GOVERNMENT

- Crisis in Health Care Delivery — Rescuing Medicine From the Clutches of Government 615

GRADY MEMORIAL HOSPITAL

- Grady Memorial Hospital Centennial: History and Development, 1892-1992 621

GOVERNMENT REGULATION

- Digesting Government's Regulatory Alphabet Soup 549

GROWING HEALTHY

- The Challenge: A Generation of "Growing Healthy" Children 369

GYNECOLOGY

- Primary Fallopian Tube Carcinoma With Coexistent Tuberculosis Salpingitis: A Case Report 77
The Sexual Difficulties of Women 221

—H—

HEART — SEE CARDIOLOGY

HEAT STRESS

- The Effects of Heat on the Athlete 307

HORMONES

- Hormones, Behavior, and Sexuality In Women 227

HORSES

- A Countryman's Notes: On a Horse Named Boone 137

HOSPITAL MEDICAL STAFF

- Empowering the Medical Staff Through Their Bylaws 473
Getting Paid for You Hospital Work 486

Hospital Medical Staff Section — Your Access to Action	561
Hospital-Physician Relationships	458
Medical Staff Bylaws: A Contract or a Meaningless Mouthing of Words?	483
Medical Staff Bylaws: Double Edged Sword	665
Needed: Equal Partnerships Between Medical Staffs and Hospitals	425
Rethinking Credentialing: Preventing Economic Credentialing, Data Bank Problems, and Other Troubles	603

HOSPITALS

Grady Memorial Hospital Centennial: History and Development, 1892-1992	621
Hospital-Physician Relationships	458

HUMAN SEXUALITY

Evaluating Couples for Sex Therapy	233
Hormones, Behavior, and Sexuality In Women	227
Introducing This Special Issue	209
Male Sexual Problems and the General Physician	211
Medical Evaluation of Erectile Dysfunction	217
Of Chromosomes X and Y — Of Passion	207
Sexual Harassment: It's Not Just Applicable to Judges and Law Professors	247
Sexual Misconduct by Physicians	237
The Sexual Difficulties of Women	221

HYPERPARATHYROIDISM

The Changing Face of Primary Hyperparathyroidism	569
--	-----

—I—

INSURANCE

Are Patients Predisposed to Sue Their Physicians?	553
Introducing a New Department: Insurance and Financial	265
Long Term Care Insurance: A Vital Component to Estate Preservation	601

—J—

JOINT VENTURES

"And There's More..." — Federal Trade Commission Announces "New Concern" With Physician Joint Ventures	189
Hospital/Physician Joint Ventures Take Another Direct Hit	139

—L—

LAPAROSCOPY

Management of the Obstructed Ureter: Another Indication for Video Laparoscopy	83
---	----

LEGAL

"And There's More..." — Federal Trade Commission Announces "New Concern" With Physician Joint Ventures	189
Are You Liable for the Medical Malpractice of Your Co-Owners?	661
Controlling the Spread of AIDS Confidential Information	333
Guidelines for the Physician-Patient Relationship	607
Helpful Hints in Structuring Physician Employment Agreements	429
Hospital/Physician Joint Ventures Take Another Direct Hit	139
Medical Staff Bylaws: A Contract or a Meaningless Mouthing of Words?	483
Reporting Confirmed Positive HIV Tests: An Update	606
Rescuing Tort Reform	31
Sexual Harassment: It's Not Just Applicable to Judges and Law Professors	247
U.S. Supreme Court Reaffirms Right to Abortion While Permitting Some State Regulation	555

LEGISLATIVE ACTIVITIES

Push and Pull: A Look at the 1992 Georgia General Assembly	19
Rescuing Tort Reform	31

LETTERS TO THE EDITOR

11, 54, 266

LONG, CRAWFORD W.

Crawford W. Long in His Medical Setting	127
---	-----

—M—

MAG HOUSE OF DELEGATES

Meaning and Metaphor: Highlights of MAG's 1992 Annual Meeting	381
---	-----

MAG SCIENTIFIC ASSEMBLY

MALPRACTICE

Are Patients Predisposed to Sue Their Physicians?	553
Are You Liable for the Medical Malpractice of Your Co-Owners?	661

MEDICAID

Georgia Medical Care Foundation: Medicaid Precertification Announcement ...	457
Medicaid Precertification Department	355

MEDICAL HISTORY

Crawford W. Long in His Medical Setting	127
Grady Memorial Hospital Centennial: History and Development, 1892-1992	621
The Forging of the Renaissance Physician, Parts III and IV	165
The Forging of the Renaissance Physician: A Philosophic and Historic Perspective, Parts I and II	119

MEDICAL POLITICS

Crisis in Health Care Delivery — Rescuing Medicine From the Clutches of Government	615
The Real Revolution in Medicine	633

MEDICAL PRACTICE

Guidelines for the Physician-Patient Relationship	607
---	-----

MEDICAL RECORDS

Medical Record Documentation and the New Visit Codes	366
--	-----

MEDICARE

Cost to Society High for Bogus DME Orders	17
Highlights of the Medicare Advisory Committee Meeting Between MAG and Aetna	543
Improved Communication with Aetna Reaps Benefits for Georgia Physicians .	459
Medicare Rip-Off: DME Fraud Bleeds the System	23
The Real Revolution in Medicine	633

—N—

NEUTROPENIA

Granulocyte Colony-Stimulating Factor: A New Approach in the Treatment of Childhood Neutropenia	437
---	-----

NEWS CAPSULES

—O—

OFFICE LEASE

Strategies for Saving Money and Minimizing Risk on Your Next Office Lease	89
--	----

ONCOLOGY

Computerized Cancer Information Sources	143
Current Perspectives on Papillary Carcinoma of the Thyroid Gland	442
Primary Fallopian Tube Carcinoma With Coexistent Tuberculosis Salpingitis: A Case Report	77

The American Cancer Society's Rehabilitation Programs: Toward A Comprehensive Cancer Cure	87
---	----

ORTHOPEDICS — SEE SPORTS MEDICINE

—P—

PEDIATRICS

Granulocyte Colony-Stimulating Factor: A New Approach in the Treatment of Childhood Neutropenia	437
---	-----

PEER REVIEW

From the Georgia Medical Care Foundation: "Premature Discharge" As a Peer Review Concept	329
Peer Review, Hearing Requirements, and Antitrust: Maximizing Federal Health Care Quality Improvement Act Compliance and Immunity 495	

PHYSICIAN CONTRACTS

Physician Contracts: HMOs, PPOs, and Hospital-based Physicians, Exclusive Contracts, and Employment	489
---	-----

PHYSICIAN RECOGNITION AWARD RECIPIENTS 1992

PHYSICIAN-PATIENT RELATIONSHIP

Guidelines for the Physician-Patient Relationship	607
---	-----

POETRY CORNER

PRACTICE MANAGEMENT

Digesting Government's Regulatory Alphabet Soup	549
Getting Paid for You Hospital Work	486
Managing Your Office Manager	423
Maximizing Productivity of New Associate Physicians: Proven Strategies	363
Medical Record Documentation and the New Visit Codes	366
Practice Automation: An Essential, Not Luxury, Tool	669
Time Management: What It Is, How It's Done	611

PRESIDENT'S PAGE

AIDS and HIV Testing	8
Highlights of the Chicago Meeting	408
Medical History	102
One More Time	540
Proposed Changes of the Health Care System	346
Really Bad Reimbursements at Various Stages (RBRVS)	159
The Coming Conflict of Ownership/Referral	456

PYOMYOSITIS

Tropical Pyomyositis	75
----------------------------	----

—R—

RADIOLOGY

What's New in Cardiovascular Imaging in 1992?	61
---	----

REHABILITATION

A National Resource — A State Treasure	177
The American Cancer Society's Rehabilitation Programs: Toward A Comprehensive Cancer Cure	87

RETRACTION

.....	109
-------	-----

RETIREMENT

Juggling Fiduciary Responsibility — How to Avoid Dropping the Ball	421
Long Term Care Insurance: A Vital Component to Estate Preservation	601
On Retirement	59

ROOSEVELT WARMS SPRINGS INSTITUTE FOR REHABILITATION
A National Resource — A State Treasure 177

—S—

SEXUAL HARASSMENT
Sexual Harassment: It's Not Just Applicable to Judges and Law Professors 247

SHOULDERS
Shoulder Function and Dysfunction in the Baseball Pitcher 289

SPINE INJURY
Spine Injury in Sports 323

SPORTS MEDICINE
Acute Hemarthrosis of the Knee 301
Anterolateral Impingement of the Ankle 297
Cardiac Arrhythmias in Presidents and Other Athletes 311
Introducing This Issue 273
Ligamentous Injuries to the Lateral Aspect of the Ankle: The Ankle Sprain 293
Shoulder Function and Dysfunction in the Baseball Pitcher 289
Spine Injury in Sports 323

The Ageless Athlete 283
The Effects of Heat on the Athlete 307
The Female as a Sports Participant 285
The Preparticipation Screening Evaluation 277
Treating Injuries in Tennis 317

SUDDEN INFANT DEATH SYNDROME (SIDS)
Investigating SIDS and Other Infant Deaths 433

SURGERY
Surgical Treatment of Spontaneous Dissection of the Internal Carotid Artery: Case Report and Review 27

—T—

TEENAGE PREGNANCY
Teenage Pregnancy: Everyone's Responsibility 377

TENNIS
Treating Injuries in Tennis 317

THANKSGIVING
Of Thankfulness 597

TIME MANAGEMENT
Time Management: What It Is, How It's Done 611

TORT REFORM
Rescuing Tort Reform 31

TRUST PLANNING
Having Your Cake and Eating It, Too: Common Sense in Charitable Trust Planning 36

—U—

UROLOGY
Management of the Obstructed Ureter: Another Indication for Video Laparoscopy 83

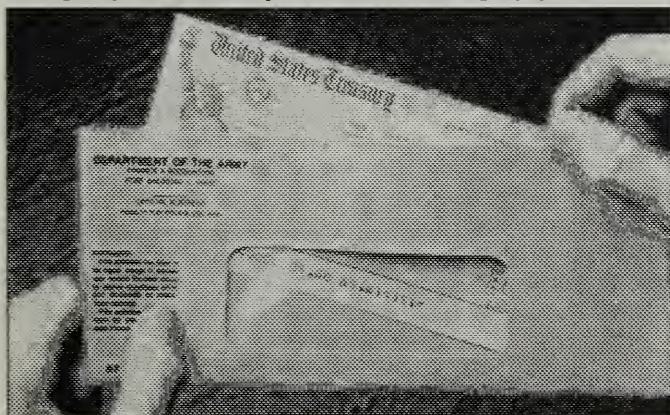
—W—

WOMEN'S HEALTH (See also, GYNECOLOGY)
Coronary Heart Disease in Women 679
The Female As a Sports Participant 285

WORKER'S COMPENSATION
Factors Affecting Return to Work After Job-related Injuries 673

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ADVERTISING INDEX

Access Professional Conferences and Seminars.....	677
American Medical Association	678
Atlanta Medical	687
AuraTech Inc.	648
Classified Advertisement	687
CompHealth	655
Health Quip, Inc.	655
Knoll Pharmaceuticals	612A-B
Lilly, Eli & Company	660
MAG Leadership Conference	649
MAG Membership	688, 689, 690
MAG Membership Benefit	672
MAG Mutual Insurance Company	664
Mississippi Methodist Rehabilitation Center	650
Palisades Pharmaceuticals, Inc	655
Paine Webber	693
The Rocker Shop	653
Scottish Rite Children's Hospital	694
Statement of Ownership Management and Circulation	691
U.S. Army Active	663
U.S. Army Reserve	685
Walton Rehabilitation Hospital	653

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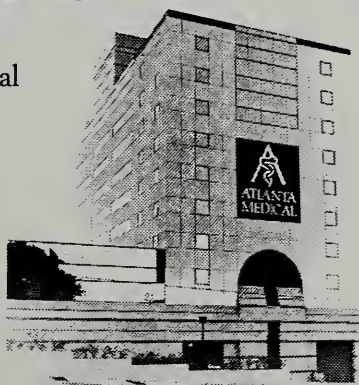
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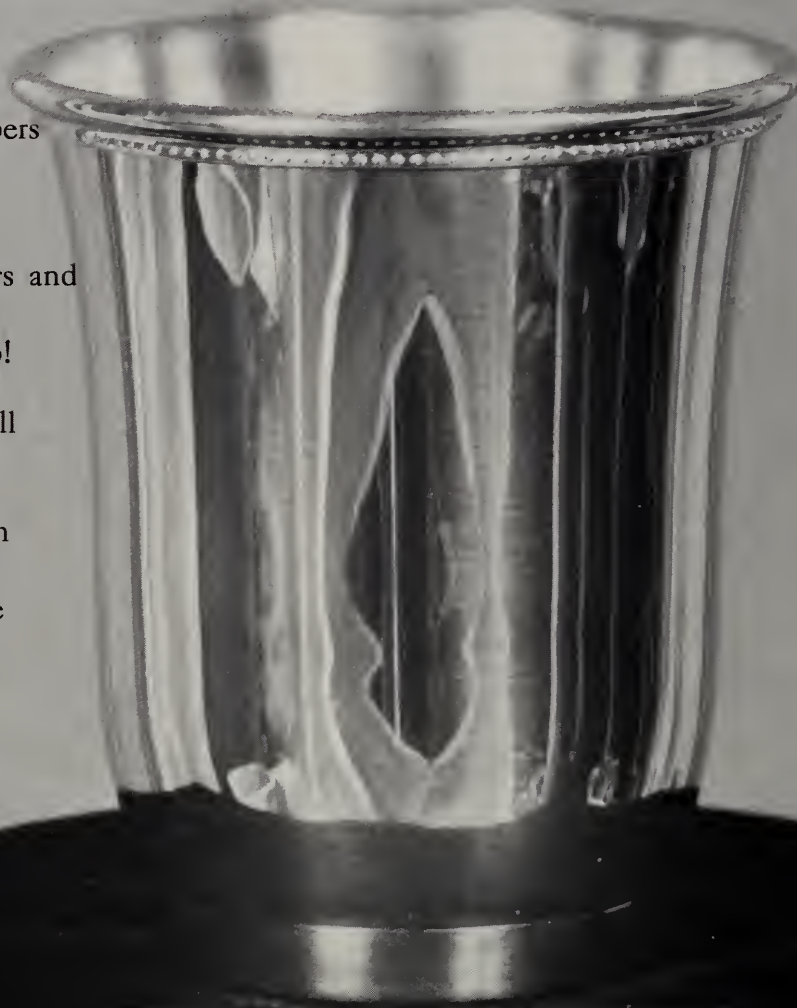
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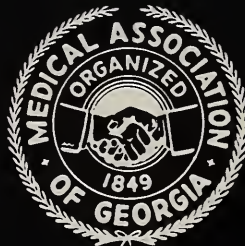
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Circle One
(Y, N)
(Y, N)

MEDICAL EDUCATION	
1. School of Medicine, University of California, San Francisco, Calif.	1963-1967
2. School of Medicine, University of California, San Francisco, Calif.	1967-1970
3. School of Medicine, University of California, San Francisco, Calif.	1970-1973
4. School of Medicine, University of California, San Francisco, Calif.	1973-1976
5. School of Medicine, University of California, San Francisco, Calif.	1976-1979
6. School of Medicine, University of California, San Francisco, Calif.	1979-1982
7. School of Medicine, University of California, San Francisco, Calif.	1982-1985
8. School of Medicine, University of California, San Francisco, Calif.	1985-1988
9. School of Medicine, University of California, San Francisco, Calif.	1988-1991
10. School of Medicine, University of California, San Francisco, Calif.	1991-1994
11. School of Medicine, University of California, San Francisco, Calif.	1994-1997
12. School of Medicine, University of California, San Francisco, Calif.	1997-2000
13. School of Medicine, University of California, San Francisco, Calif.	2000-2003
14. School of Medicine, University of California, San Francisco, Calif.	2003-2006
15. School of Medicine, University of California, San Francisco, Calif.	2006-2009
16. School of Medicine, University of California, San Francisco, Calif.	2009-2012
17. School of Medicine, University of California, San Francisco, Calif.	2012-2015
18. School of Medicine, University of California, San Francisco, Calif.	2015-2018
19. School of Medicine, University of California, San Francisco, Calif.	2018-2021
20. School of Medicine, University of California, San Francisco, Calif.	2021-2024
21. School of Medicine, University of California, San Francisco, Calif.	2024-2027
22. School of Medicine, University of California, San Francisco, Calif.	2027-2030
23. School of Medicine, University of California, San Francisco, Calif.	2030-2033
24. School of Medicine, University of California, San Francisco, Calif.	2033-2036
25. School of Medicine, University of California, San Francisco, Calif.	2036-2039
26. School of Medicine, University of California, San Francisco, Calif.	2039-2042
27. School of Medicine, University of California, San Francisco, Calif.	2042-2045
28. School of Medicine, University of California, San Francisco, Calif.	2045-2048
29. School of Medicine, University of California, San Francisco, Calif.	2048-2051
30. School of Medicine, University of California, San Francisco, Calif.	2051-2054
31. School of Medicine, University of California, San Francisco, Calif.	2054-2057
32. School of Medicine, University of California, San Francisco, Calif.	2057-2060
33. School of Medicine, University of California, San Francisco, Calif.	2060-2063
34. School of Medicine, University of California, San Francisco, Calif.	2063-2066
35. School of Medicine, University of California, San Francisco, Calif.	2066-2069
36. School of Medicine, University of California, San Francisco, Calif.	2069-2072
37. School of Medicine, University of California, San Francisco, Calif.	2072-2075
38. School of Medicine, University of California, San Francisco, Calif.	2075-2078
39. School of Medicine, University of California, San Francisco, Calif.	2078-2081
40. School of Medicine, University of California, San Francisco, Calif.	2081-2084
41. School of Medicine, University of California, San Francisco, Calif.	2084-2087
42. School of Medicine, University of California, San Francisco, Calif.	2087-2090
43. School of Medicine, University of California, San Francisco, Calif.	2090-2093
44. School of Medicine, University of California, San Francisco, Calif.	2093-2096
45. School of Medicine, University of California, San Francisco, Calif.	2096-2100

School	Location	Degree	Date
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RESIDENCIES

Date _____

Date _____

ECFMG#

(Continued on other side)

EXPECTED RESIDENCY PROGRAM COMPLETION DATE: (if resident) _____

FELLOWSHIP: _____

Date

HOSPITAL AFFILIATIONS: _____

(1)

(2)

(3)

TEACHING APPOINTMENTS: _____

Date

MILITARY: _____

Branch

Dates

Rank

Branch

Dates

Rank

PREVIOUS STATE MEDICAL SOCIETY MEMBERSHIPS _____

ARE YOU A CURRENT AMA MEMBER? _____ YES _____ NO LAST YEAR PAID: _____

Within the last 5 years, have you been convicted of a felony crime? () Yes () No If yes, please provide full information.

Within the last 5 years, has your license to practice medicine in any jurisdiction been limited, suspended or revoked?
() Yes () No If yes, please explain.

Within the last 5 years, have you been the subject of any disciplinary action by any medical society or hospital staff?
() Yes () No If yes, please explain.

If elected to membership, I agree to conduct myself professionally and personally according to the principles of medical ethics and to be governed by the Constitution and Bylaws of the county society, the Medical Association of Georgia and the American Medical Association.

I hereby release, and hold harmless from any liability or loss, the _____
Medical Society, and the Medical Association of Georgia, their officers, agents, employees, and members, for acts performed in good faith and without malice in connection with evaluating my application and my credentials and qualifications, and hereby release from any liability any and all individuals and organizations, who, in good faith and without malice, provide information to the above named organizations, or to their authorized representatives, concerning my professional competence, ethical conduct, character and other qualifications for membership.

County Sponsor's Signature*

Applicant's Signature

County Sponsor's Signature*

FOR COUNTY USE ONLY

APPLICATION APPROVED BY: _____

CERTIFIED BY: _____ DATE OF ACTION: _____

*If you have any questions regarding sponsors, please contact your county society.



Statement of Ownership, Management and Circulation

(Required by 39 U.S.C. 3685)

1A. Title of Publication Journal of the Medical Association of Georgia		1B. PUBLICATION NO. 0 0 2 5 7 0 2 8		2. Date of Filing 9/30/92
3. Frequency of Issue monthly		3A. No. of Issues Published Annually 12		3B. Annual Subscription Price \$40.00
4. Complete Mailing Address of Known Office of Publication (Street, City, County, State and ZIP+4 Code) (Not printers) 938 Peachtree Street, NE. Atlanta, GA 30309-3990				
5. Complete Mailing Address of the Headquarters of General Business Offices of the Publisher (Not printer) 938 Peachtree Street, NE, Atlanta, GA 30309-3990				
6. Full Names and Complete Mailing Address of Publisher, Editor, and Managing Editor (This item MUST NOT be blank)				
Publisher (Name and Complete Mailing Address) Medical Association of Georgia, 938 Peachtree Street, N.E., Atlanta, GA 30309-3990				
Editor (Name and Complete Mailing Address) Charles R. Underwood, M.D., 938 Peachtree Street, N.E. Atlanta, GA 30309-3990				
Managing Editor (Name and Complete Mailing Address) Susan T. Johnson, 938 Peachtree Street, N.E., Atlanta, GA 30309-3990				
7. Owner (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given. If the publication is published by a nonprofit organization, its name and address must be stated.) (Item must be completed.)				
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Medical Association of Georgia		938 Peachtree Street, N.E. Atlanta, Georgia 30309-3990		
8. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages or Other Securities (If there are none, so state)				
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none				
9. For Completion by Nonprofit Organizations Authorized To Mail at Special Rates (DMM Section 424.12 only) The purpose, function, and nonprofit status of this organization and the exempt status for Federal income tax purposes (Check one)				
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10. Extent and Nature of Circulation (See instructions on reverse side)		Average No. Copies Each Issue During Preceding 12 Months		Actual No. Copies of Single Issue Published Nearest to Filing Date
A. Total No. Copies (Net Press Run)		7,049		7,230
B. Paid and/or Requested Circulation				
1. Sales through dealers and carriers, street vendors and counter sales		0		0
2. Mail Subscription (Paid and/or requested)		6,774		6,887
C. Total Paid and/or Requested Circulation (Sum of 10B1 and 10B2)		6,774		6,887
D. Free Distribution by Mail, Carrier or Other Means Samples, Complimentary, and Other Free Copies		0		0
E. Total Distribution (Sum of C and D)		6,774		6,887
F. Copies Not Distributed				
1. Office use, left over, unaccounted, spoiled after printing		275		343
2. Return from News Agents		0		0
G. TOTAL (Sum of E, F1 and 2—should equal net press run shown in A)		7,049		7,230
11. I certify that the statements made by me above are correct and complete		Signature and Title of Editor, Publisher, Business Manager, or Owner		

WINTER YARD

*The bitter cold
sucks the air hollow,
vacant as nothing.
Gray limbs puncture
the vacuum air
Above lawn walked bare
of crunchy stiff frozen grass.
Colorless leaves
curl forlornly, embraced
in straggly arms of ilex
Olive leaves now black.
The cold world dead
save for
The soft sough of winds
searching through the ruins
of squirrel nests,
High brown clumps bare of
summer's hiding leaves.
Vapors from lungs billowing out
to fill the emptiness
Vanish quickly in the lost loneliness
That thrusts the cold
to heart
And pushes everyone to warmth inside.
With dimming light
the sun is gone
the wind dies
and in earnest now
The still bitter cold
crushes all
in its embrace.*

SPACE

*A huge orange-gold glowing molten ball
Popped up above the horizon
And through the atmospheric filter
Its three dimensional roundness
could easily be discerned.
— Surely a square sun would be out of place.
“With this ring I thee wed
And in its round unending circle
Is symbolized the eternal unending
nature of Love.”
The earth is round.
— Every physical entity becomes round
When allowed to assume its most natural
Efficient physical shape.
Round is all around.
But if square stands together
so much more efficiently
— and it does —
Space must be a natural requirement.
Please give me my natural
space and room
around me,
For I shall be round and efficient
and individual,
Not square and fitted into form.*

DOGWOOD “*Cornus florida*”

*Petite dogwood, maiden fair,
In spring with flowers in your hair,
And for each season's circumstance
A change of beauty to enhance.
The wilt of summer's heat forestall
With thick green leafy parasol.
Your winter's dress is quite divine
In coat of icy crystalline.
And chill of Fall you moderate
With brilliant color satiate.
You dress each season as its due
In leaves and blooms of brilliant hue.
Oh, Canine Wood your true delight;
You have a bark, but have no bite.*

By John P. Wilson, MD, general surgeon, Atlanta.

NOT TO CIRCULATE

NOT TO CIRCULATE



